

From The STAFF

W.T.F.D.A. Headquarters, P.O. Box 514, Buffalo, NY 14205

THINK SPRING...It arrives this month, believe it or not. For most club members, it may have seemed like a long winter, but the end is in sight. February proved to be surprisingly active for TV and FM DX to some WTFDAers. Word has it that tropo activity was quite a bit better than expected in some areas, with some ducting in the Midwest to 500 miles and beyond on UHF taking place about the time this is being written. Also, a massive auroral opening was noted by DXers around the 8th of February, and indications are that it was one of the best in years, with effects noted even in southerly areas. This one made headlines, and one Associated Press item on it appears on page 33.

"ALL-SHORTWAVE DX SPECIAL?" NOT QUITE!...In the January issue, FROM THE STAFF refers to the ABC Talkradio DX special of last December 7th as "all-shortwave." This was based on comments made to club HQ by a few members, and is not accurate. Member Greg Hardison, who sent us a tape of Dr. Bruce Elving discussing SCA and FM DX on the show, will set the record straight for you on page 22 of this issue. For those of you who wrote to us and criticized the show and WTFDA's support of this fine effort (one DXer even criticized the show before it took place) let us ask this question: what WERE you listening to? Our thanks go to Greg for clearing things up. Any further comment on this may be sent to Alan Hyams for the MAILBOX column.

ADDRESS CHANGES...Going to send a DX report to the EASTERN TV-DX editor? John has moved, so send them to John F. Combs at 2969 Herschel #7, Jacksonville FL 32205. His phone number has changed too, so take note of the new one, which is on page 40. VUD column editors, don't forget: your columns now go to a new address, not to Dave Nieman. Future issues will be readied for printing by Layout Associates, and will continue to be done by the same printer in Buffalo. Expect to see a few layout changes next month.

CONVENTION 1986 ONLY FIVE MONTHS AWAY...Seems like a long time, but it really isn't. Upcoming VUDs will be informing you of plans for this year's club event, and if you'd like to volunteer to be a part of the program, (giving a lecture, or a demonstration, etc.) now's the time to drop a line to this year's host: Dr. Michael Lapinski, RD #2, 2478 Palm Road, Jamestown NY 14701.

MAILBOX: Feds may outlaw utility DX(!).....	3
FCC FM NEWS: Plus readers' reports and other news.....	4
TELEVISION NEWS: Canadian and international news.....	12
FM STATISTICS: Time to update.....	20
FEEDBACK: Greg Hardison responds to January VUD blurb.....	22
TECHNICAL TOPIX: All about S-meters.....	23
SOUTHERN FM-DX: Another whopping report from Dyer.....	28
QSL CORNER: Goodies arrive, but no QSL.....	30
COME TO THE 1986 WTFDA CONVENTION: It's coming, this summer, in NY.....	31
NORTHERN FM-DX: Airwaves in cold storage.....	32
STORM DISRUPTS MAGNETIC FIELD, COMMUNICATIONS: Feature from AP.....	33
CCI (UNIDENTIFIED DX): More unIDed's solved.....	34
PHOTO-NEWS: Pictures from Ely-WI and Pizzi-NM.....	36
WESTERN TV-DX: DX and reports scarce.....	37
TV DX: A story about close encounters.....	38
EASTERN TV-DX: Editor on the move; '86 starts with good tropo.....	40
STATION BREAK: The latest stuff for sale from WTFDA members.....	42

Logos on front cover were sent in by Richard Eddie (St. Louis, MO).



MAILBOX

Alan Hyams
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March, 1986

Last month, I mentioned the topic of controversy, and how I didn't want to have to be the one to stir it up. Well, I didn't have to. Richard S. Berg-Anderson has sent in a report on a new bill that would severely hinder our hobby, especially PSB DXers:

"I have what I think is a very serious topic to discuss, particularly in light of the fact that the VUD includes a column on VHF Utility DX. That topic is the Electronic Privacy Communications Act introduced in the U.S. Senate (as S.1867) by Senator Leahy (D-Vt) and the U.S. House (as H.R. 3378) by Rep. Kastnauer (D-WI). This bill, if passed, would extend prohibitions against "wiretapping" to cellular/mobile/cordless telephones (and perhaps marine telephones and even Ham radio "autopatch"), making it a violation of federal law to monitor such transmissions.

I am opposed to this bill on principle. While it might sound fine to extend "land line" type privacy to wireless telephones, this opens up a can of worms because these wireless telephones are, after all, radio transmitters. Since 1919, when the U.S. Navy was blocked from controlling radio (which it had taken over during WW I), our nation has had the basic principle that while the message sent "belongs" to the sender and intended receivers (preventing us from "using" or "divulging" that message), the airwaves used belong to "we, the people" (allowing us to listen in). We are one of the few countries (if not the only country) where that is true- in many countries, the government controls the airwaves, even the FM and TV broadcasts which are the staple of our organization.

This bill begins our going down the road away from that sixty-seven year old principle. If one radio service is given a higher standard of privacy than others, how much longer can it be before the others demand that same higher standard?

...I urge all WTFDA members to, like myself, think long and hard on this issue and act accordingly. Perhaps we should write our senators and representatives regarding this bill (I have already done so). Perhaps we should poll the membership and, if necessary, oppose this bill as a club. Perhaps even the entire ANARC community may have to get involved. I don't know the best course to take; I do know this bill, if passed, may set a very dangerous precedent."

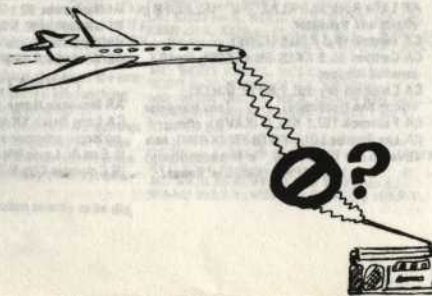
I agree with Richard that this bill should not pass. If it should, however, it will have an effect limited to the bands already involved. Commercial broadcasters will have no interest in such a law.

Another thing: to say that the airwaves belong to the "public" sounds nice, but think of how accurate that statement is. What does "public ownership" mean anyway?

NEXT TIME: Robert Goodman's proposed call letter policy.

Till then, 73s to one and all,

AL



I could point out that Dr. Larry Walklin is a former student of mine when I taught at Kansas State University, Manhattan, KS. He is general manager of KRNU (FM) *90.3 Lincoln NE, and one in academia who favors only student-training radio, not public radio. I have been told that commercial broadcasters are not as hostile toward public radio in other states as they are in Nebraska—at least elsewhere they pay lip service to it, but in Nebraska there is open war. Unless it's student training radio, where they can get announcers cheaply. Move over Marcos and Aquino—there's real fighting in Nebraska!

Also on a personal note, KUMD *103.3 interviewed me, and the article is in their February-March program guide, "Airwaves," University of Minnesota—Duluth, 10 University Drive, Duluth MN 55812-2496 (write for a copy if you're interested). The article is on the front page, along with a 29-year-old picture of me as a student, and my memories of helping start KUMD 30 years ago. Enclose a 39¢ stamp to help them.

Walter Patton sent lots of Canada news this month, and he points out a problem regarding Canadian station information. "RECENT CRTC NOTICES have taken to omitting all technical detail. Only the name of the applicant and the type of service (FM, TV, etc.) is given. The same has been true of decisions for some time. For more information you are supposed to either go see the applicant or visit the CRTC offices in Hull PQ. They do say a complete text of decisions is available by writing to them (or even by phoning them) but no mention is made of cost or what the reaction would be if you were to ask for all broadcasting decisions. Perhaps a few letters of COMPLAINT MIGHT BE EFFECTIVE, but I doubt they will send chills up the spines of these friendly, all-knowing bureaucrats. However, the address of the secretary of the CRTC is:

Fernand Beliste
CRTC
Central Building
Les Terrasses de la Chaudiere
1 Promenade du Portage
Hull PQ K1A 0N2 CANADA

"CKO-FM stockholders have given the company one more year to turn a profit or they will pull the plug. There is a difference between a license in Canada and the U. S. The CRTC grants a license to an applicant who meets the commission's criteria. The actual facilities, however, require the approval of the Department of Communications which grants a Technical Operating Certificate for the transmitter, antenna, etc. Since both appear to require the other (certificate and license) it is a wonder there is ever a final approval. "As to spelling (the license—licence question), here in Canada both British and American spellings are used, preferably in the same sentence. Letters to the editor columns in newspapers carry raging debates as to whether words should end -our or -or and -er or -re. We also use the abbreviations month/day/year, day/month/year and the new ST standard year/month/day (1-27-86, 27-1-86 and 86-1-27). Then of course, there are those who have not quite made the switch to metric..."

Also in Canada news, Deane D. McIntyre says all of Saskatchewan is on Central Standard Time throughout the year, no DST observed at all in that province. But someone else sent me a map with new time zone boundaries, showing at least some of SASK in the MST zone, so I will go by that reference for now. "Otherwise, the time zone maps and DST information in the Atlas is correct for Canada, as is the information regarding formats, etc. for the Edmonton FM stations. Most of the local AM stations (CHED, CFCW, CJCA, CHQT, CFRN) are now in stereo, but stereo AM receivers are in very short supply, the demand for same being nearly nonexistent. You may also be interested to know that FM has almost exactly 50% of the Canadian radio audience as of last year (1985), being weakest in Saskatchewan."

Greg Hardison, ABC, writes re the Ray Brian Show and my participation or lack thereof. "Breaking in with any of your excellent observations on VHF/UHF would have IN NO WAY been a matter of rudeness—rather, simply, equal participation in a conversation. I realize you were at a disadvantage being on by phone, rather than in studio, yet, as you recall, and as I expected, we received 2 or 3 calls from listeners specifically addressed to you, about FM. I invited you onto the show to share your expertise on FM, etc., and the conveyance of such specialized info. requires an approach of active—almost aggressive—participation in the 'talk-flow'... Indeed, the entire FM DX lobby, obviously, needs to show a little more self-assurance about making itself known in the overall DX-mishmass. I know bloody well the FM/VHF/UHF DX sphere is worth promoting—that's why I asked you to join us on the show! Need I say more? Please inform me when the Tenth edition is out—I can definitely appreciate the work you're putting into it, with deregulation and all. I do keep mine updated, thanks to your column, which, by the way,

is about 80% of my reason for being in the club (after L. A.'s idea of FM DX is Tijuana during a smog-alert!). Keep up the great work—and, dammit, blow your horn about it a little more!"

W. R. McIntosh sent an article on ABC and Capital Cities stations finalizing their merger, and another which included the latest L. A. ratings. KIIS 102.7 was first and KABC was second, the one on which I was on [Ray Briem show], 790 AM. Then it was KJOL 98.7, KLOS 95.5, KBIG 104.3, etc.

And Tom Cornell sent an article showing how WZVZ Kokomo



advertised its move to 92.7 Jan. 15. The station celebrated its move by having a party at Biggs Lounge in the Ramada Inn, Hwy. 31, from 9 p. m. to 1 a. m. Tom's comment: "At long last, the move is taking place." Waldo Bishop sent an article in which it is asserted that WANM AM, a daytimer, is the city's number one rated station. It is a black-oriented and staffed station, and is the AM side of WAMF *90.5 (Florida A&M University).

FM PIRATE CLOBBERED IN MINNESOTA

Some of you may have seen the Jan. 6 "Broadcasting," p. 186, a small piece called "Pirate Hunt." "FCC announced it has shut down pirate radio station 'KSMR' Minneapolis, which was operating on 105.1 MHz, unassigned FM frequency. Other cities where pirates are believed located were listed, and Lyle Henry tells me 104.7 in Los Angeles is a favorite spot for pirates (none of which has SCA) to hang out.

Well, I have heard a rare tape of the bust of 'KSMR.' The FCC was notified the station was on the air, and even though it was a weekend, the FCC man promptly drove to the area, called the person who complained, and told him to get a tape ready. The pirate left the air briefly and came back on, this time with the FCC guy saying "This is the FCC. We are closing down 'KSMR' because it does not have a license." Silence.

The FCC man, whose office is in ST. Paul MN, disclosed that the station had excellent equipment, much better than some commercial stations. It did not take him long to find the pirate. I told the person who complained that I disagreed with his method. I would have tracked down the pirate myself (not that difficult with a directional FM antenna, map of the city so you can plot the beam, a car radio with FM and possibly a low-sensitivity portable radio so you can pinpoint it to the exact house once you find the neighborhood), knocked on his door while he was broadcasting, and found out how friendly he was. If not friendly at all, and he was causing interference, then and only then would I have notified the FCC. I say this with a background of pirate broadcasting myself, including the first year of KUMD Duluth broadcasting, which was entirely extra-legal AM, using a phono oscillator and longwire antenna and later a 250-watt transmitter on 880 kHz. Citizens with information on pirates are asked to notify the FCC engineer in charge, Box 1588, Grand Island NE 68802-1588; (308) 382-4296. When I was in Kearney and reported to them my own illegal FM translator, it took them six months to respond and order me to quit broadcasting—they did that by mail, certified, return receipt requested. No door-knocking or confiscation of equipment. KUMD, when it was turned in, had the complaint addressed to KUOM (AM) Minneapolis, because the FCC did not know a branch of the University of Minnesota existed in Duluth. Soon after that KUMD went FM, which is a long story that began with pirate broadcasting of which I can proudly say I was a part.

I believe "KSMR" had stereo, and that no equipment was confiscated, although the station's operator was no kid, probably in his 30s. In another Minnesota station close-down, which apparently had nothing to do with the FCC, a Minneapolis Star and Tribune article said: Two of the Twin Cities' newest radio stations have been taken off the air. It wasn't because of low audience ratings, however, even though they did broadcast some fairly dull stuff. The stations were low-power FM outlets at the State Capitol that began carrying floor sessions of the Minnesota Senate and House at the end of the 1985 session. The stations, at 88.1 and 89.1 on the dial, interfered with the signals of two commercial (?) stations and couldn't be heard in the State Office Building, where

most legislative offices are. So the whole idea has been dropped. Legislators and staff members in the Capitol and parts of the State Office Building will receive floor debates via wires and speakers. In other areas, they will have to dial a phone number and listen to desktop speakerphones. A good use for SCA—no?

Walter Kowalczyk, PA, writes: "In this digital age, I hear stations giving their exact frequencies now, which is good. This past Sept., passing thru Harrisburg, I had the chance to see an old Zenith console radio that tuned the old FM band as well as 88-108. The selector was labelled 'FM-45' and 'FM-100' as well as AM, of course!"



NEW ZENITH 'C With Armstrong 2-Ba

A regal beauty featuring the Cobra Tone ARMPLUG SHORTWAVE, and TWO organ and large Concert Grand space plus phono tube plus indicator plus rectifier tube.

NEW ZENITH "CHIPPENDALE" 2-band FM. I just happen to have a picture! From 1948, text reads: "A regal beauty featuring the New Way to Play Records with the Cobra Tone Arm plus STANDARD, SHORTWAVE, and TWO BAND FM radio... 9 radio tubes plus phono tube plus tuning indicator plus rectifier tube. \$425.00. Stern & Company, Wholesale Distributors, 210 Chapel Street, Hartford 1, Conn."

"Scanning the dial for any new SCA, I heard WPNT simulcasting KDKA (AM). I don't know what this was all about, as it is the baseball off-season, and the stations are no longer commonly owned... Normally, the SCA is off except for baseball—but at one time they simulcast continually. An idea: now that the FCC deregulated SCA and anything can be carried on it, commonly owned FM and AM stations should simulcast the AM program on SCA. With you (and others) selling receivers, this could eventually prove profitable to the stations. I can think of WOKU having SCA equipment gathering dust since the blind reading service they used to carry folded. It would cost next to nothing to operate and nothing to program, the AM program being at the common transmitter site. Although I can see their tower out my bedroom window, about 6 miles away, their AM signal here is extremely poor at night. If I could get it on SCA, I might be inclined to tune in once in a while. I was in Mount Pocono PA in 1981 and could not hear the 92.1 translator you have listed. Instead, I heard the Nanticoke station on that frequency, coming from about 40 miles away.

"Commonly owned TV-AM stations could carry the AM on the new TV SAP channel, for which receivers are becoming readily available. Radio Shack even has a stand-alone TV stereo sound-SAP receiver for sale. This, and the SCA idea above, could be the way to 'save AM,' putting it on an FM radio system whose signals go places without all the disturbances typical of AM. Some daytime AM stations are being authorized to operate at night with powers of as low as 5 watts. One such station tried it and couldn't hear it 1/4 mile away, but there are the visionaries who are trying to make something of this. Better they should lease an SCA channel, then maybe someone might actually hear them!"

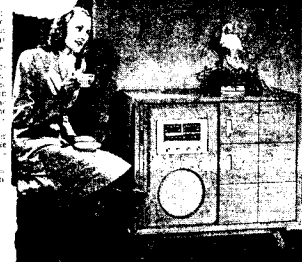
More about pirates, this time from Ernie Wilson's "Experimental Broadcaster's Newsletter," Vol. 3, No. 1, write him at Box 130, Paradise CA 95969. "The FCC has recently renewed its effort to shut down unlicensed stations. From the reports we get, however, we come to these conclusions: 1) the FCC is understaffed; 2) they tend to ignore unlicensed AM and FM stations; 3) they respond to complaints about interference; 4) monetary forfeitures (fines) range from 0 to \$1000; 6) sometimes they will confiscate equipment; 7) sometimes they give a verbal warning with no other penalty; 8) if you play 'ignorant of the law' (gee... I didn't know I was doing wrong), they may go easier on you."

Walter Patton, or somebody, sent me a booklet on how citizens can take part in decisions of the CRTC. Probably the best way to change policy in a way that will help DXers is to urge them to give more complete technical information on stations in their news releases, and writing them at the address on the previous page would be a good idea. I am not sure I will find the time to do so, but I am sure any of you could put in your own words why they should do this, and the point will get across where it should.

AND, I'VE GOTTEN INFORMATION FROM DAVID A. SINCCLAIR, VANCOUVER BC, WHO ENJOYS READING THIS COLUMN. HE SENT AN ITEM FROM THE PROVINCE, HIS CITY'S MORNING NEWSPAPER, ON VARIOUS APPLICANTS FOR VANCOUVER FM CHANNELS. CONSENSUS SEEMS THAT AN APPLICANT PROPOSING A CONTEMPORARY MUSIC FORMAT MAY HAVE AN INSIDE TRACK. IN CANADA, THE MUSIC FORMAT YOU PROPOSE HAS A BEARING ON WHETHER YOU WILL GET A LICENSE, UNLIKE IN THE U.S. THE CRTC CONTROLS ON PROGRAMMING ARE BEING IMPOSED BY CANADIAN COMMERCIAL BROADCASTERS. "THIS MEANS THE FM BAND IS HEAVILY REGULATED ON MUSIC, TALK AND NUMBER OF COMMERCIALS, WHILE THE AM BAND IS RELATIVELY FREE," SAYS PIERRE NADEAU, CANADIAN ASSOCIATION OF BROADCASTERS. CONTROLS, LIKE ON CANADIAN CONTENT IN RECORDS, MAKE IT VERY HARD FOR STATIONS IN VANCOUVER TO COMPETE, "BECAUSE FM RADIO IN WASHINGTON STATE IS UNREGULATED. WE'RE GETTING A LOT OF COMPETITION FROM THE SEATTLE AREA," SAID ONE CRTC INFORMATION OFFICER. IN VANCOUVER 93.7, 95.3, CHILLWACK 107.5, ABBOTSFORD/NORTH VANCOUVER 104.5, AND VICTORIA 92.1 AND 100.3, AND IT WAS HE WHO SENT THE ITEM ON CRTC PARTICIPATION, AND NOT WALTER PATTON. ANYWAY, THANKS FOR ALL YOUR CONTRIBUTIONS. THIS MONTH WAS THE THICKEST FILE EVER, AND I HOPE YOU EXCUSE ME FOR ALLOWING SOME OF IT TO GO ASTRAY AND WIND UP IN THE WRONG ENVELOPES.

Stromberg Carlson's Mike Hancock Crosby Con

Hartford Times, March 29, 1948



Mike Hancock Crosby Con... The article describes the features of the Stromberg Carlson Model 1210, including its standard and FM bands, record-changer, and light-light pickup. It also mentions the radio's compact size and the inclusion of a 10 or 12-inch records in sequence. The article is dated March 29, 1948, and is from the Hartford Times.

CONTRIBUTORS: Waldo F. Bishop, Tallahassee FL; Louis R. Brinson, Laguna Niguel CA; Danny Burnett, Stillpoint CA; J. Chamberlain, Hinsdale NY; Saul Chernov, Paris ON; Tom Cornell, Greentown IN; Larry Fuss, Jackson GA; Paul L. Gaines, Detroit MI; Jim Gibbons, Colonia NJ; Robert Grant, Detroit MI; Gregory S. Harlan, Fairport NY; Bob Hienrich, Westport IA; who sent the same story that was in a month ago KUCC *89.3 Des Moines including over station; Also: Lyle C. Henry, KIQQ, Los Angeles CA; Walter Kowalczyk, North Huntington PA; Nick Lotz, Atlanta GA; Charles B. Lowell, Minot ND; W. R. McIntosh, Granada Hills CA; Deane D. McIntyre, Edmonton Alberta (is that correctly abbreviated AT or AB?); T. K. McVey, Knoxville TN; Paul W. Morrissey, Hull MA; David J. Niseman, Akron NY; Rod O'Connor, who sent a nice card showing where he is living, Kodiak AK, with white-capped mountains behind it; Merrill Oliver, Waters Information Services, Birmingham NY; Ken Onyschuk, Oak Lawn IL; J. S. Palmater, Sr., Winter Park FL; W. F. Fattullo, Portland OR; Walter Patton, Willowdale ON; Kevin Pugh, New Hope AL; Franklin and Richard Reese, Jersey Shore PA; David A. Shogren, Princeton MN; David A. Sinclair, Vancouver BC; Richard Steinberg, Hudson MA; Raich Strobel, Muncie IN; Stephen Turner, St. Catharines ON; E. Wilson, Paradise CA; A. G. Williams, Verdun PQ; Roger Winsor, Champaign IL; Tracy Wood, Hepzizah (Augusta) GA. And a mystery reporter, who lives 1260 km WNW of where the WSPJ who have been file of historic FM pictures and documents, and a Los Angeles FM band spectrograph, notably showing no activity on 99.5 when KHOF was off, and KLLA had not begun broadcasting.

TELEVISION NEWS

Bill Fahber, editor
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FORUM, PART ONE

Mail has been a little heavy, so I decided to get a head start on the column. Quite a bit of international news, including the Caribbean area, several contributors of Canadian news, and even French television.

W.R. McIntosh sent the article on French television, from the 12/19/85 Los Angeles Times. Up to now, French television is entirely government-controlled. But now the government is allowing private commercial channels to compete with the government channels. But critics fear that French television may sink to the levels of Italian television. The government awarded the first license to a French company which is connected with Silvio Berlusconi, who runs a commercial television empire in Italy, programming American soap operas, syndies, and movies with heavy amounts of commercials. The decision to grant the license to that company has political implications, as Berlusconi is on good terms with socialist government officials in Italy and France. Competing for the license was a group of three stations: Radio Monte Carlo, Radio Television Luxembourg, and Europe 1. Right wing opposition warned that, if it comes to power after the elections, it will sell off two of the government stations to conservative interests as commercial stations. The French senate also plans an investigation into the selection of Berlusconi's organization. The new channel, designated Channel 5, will also be available on the upcoming French Broadcast satellite, TDF1, reaching a potential audience of 200 million. Presently, the French government operates three broadcast stations and a cable channel. Although commercials are allowed, they do not interrupt programming. It had been said that government involvement with the stations stifles creativity and distorts news coverage.

W.R. McIntosh also sent three articles about the SIN affiliates, which are having legal problems, as was mentioned last month. FCC Administrative Law Judge John H. Conlon ruled that the licenses of thirteen SIN affiliates should not be renewed because they are illegally controlled by a Mexican television magnate. The 13 stations are owned by either the Spanish International Communications Corporation (5 stations), Bahia de San Francisco Television Company, Seven Hills Television Company, and various other owners of repeater stations. By law, foreign ownership of domestic television stations can not exceed 20%. None of the companies mentioned above have exceeded that limit, but the FCC based his decision on an "abnormal relationship" that could put the stations and companies under an even greater influence by Mexican media baron Emilio Azcarraga and his family. The family had made loans to the

American companies, had selected some of the employees, and had made them dependent on them for influence and direction. According to the lawyer for the companies, Conlin had not found any indications that the public had been harmed or that there was any intention to violate the law. The FCC also questioned the relationship between the Spanish International Communications Corp. (SICC) and Spanish International Network (SIN), a Mexican company mostly owned by Televisa, owned by Azcarraga. SICC and SIN are both owned partly by Reynold Anselmo, who is president of both. Both companies share the same New York headquarters. The loans in question had ended 15 years ago, were used to establish the television stations and were known of by the FCC at the time.

The second article questioned the effect of the FCC's decision on the Spanish community. SIN reaches 82% of them, offering them a tie with their cultural past. An alternative to the judge's decision could be to reorganize the stations' ownership and control, making it more Anglo controlled, which would be a slap in the face to the Spanish community.

The stations did appeal the decision to the FCC's review board, according to a third article. This suspends the revocation proceedings and allows the stations to continue operating for as long as several years until the review board makes a decision. And even after that, they can ask the FCC itself to review the decision of the review board.

HBO and Cinemax are now scrambling their satellite signals, according to another article sent in from Mc. They started scrambling on 1/15/86. Most of the other pay-TV services, and two of the networks, plan to start scrambling their signals by the end of the year.

Another blow to satellite antenna owners came from the FCC. According to another article, the FCC ruled that communities can not outlaw satellite dishes in order to promote local cable TV systems, but can still ban them if they interfere with the public health, safety or welfare or if they conflict with "reasonable and clearly defined" aesthetic values. But one group contends that because aesthetic standards are subjective, opponents of earth stations could devise any type of aesthetic standard they wished in order to prohibit the antennas.

Other miscellaneous articles: The National Endowment for the Humanities granted \$750,000 each to WGBH-TV in Boston and KCET in Los Angeles, on the condition that they match three times that amount in private donations. PBS, on the lookout for more subscribers, will be advertising their programs on network-affiliated stations in two cities (Rochester NY and Toledo OH) as a test to see if it gains viewers. The Sacramento County Superior Court ordered eleven California television stations to air the California Lottery's "Big Spin," and left the way open for the state to sue the stations to recover the production cost. Stations hadn't been airing it because

of its low ratings. Funding for the program was supposed to come from advertisers, not from lottery funds, but its low ratings had failed to attract enough sponsors.

Rupert Murdoch, owner of 20th Century Fox and six Metromedia stations, announced that he has no plans to purchase any more television stations. Westinghouse sold its Group W Cable, the nation's third largest cable TV operator, to a group of five cable companies. It is believed that the five will eventually divide up the Group W outlets among themselves. Capital Cities and ABC finalized their merger, and are now Capital Cities/ABC Inc. NBC will also change owners later this year when RCA and General Electric merge. Two Boston stations, ABC affiliate WCVB-TV and PBS outlet WGBH-TV, will begin closed-captioning their local evening news programs beginning in March. Viacom International will be buying CBS-owned station KNOX-TV, St. Louis, MO, for \$122.5 million.

It was reported previously that United Cable Television of Los Angeles was having trouble meeting its deadline to wire homes in the San Fernando Valley for cable TV. United was already fined \$121,875 for failing to install the first 50 miles in time, and it would not make its next deadline of 270 miles by 1/31, thus facing a \$100,000 fine.

One article noted 1985 as "The Year of the Takeover." CBS successfully fought Ted Turner's \$5.8 million attempt to take over; Capital Cities bought ABC for \$3.5 billion, and General Electric bought RCA, parent company of NBC, for \$6.28 billion.

W.R. McIntosh attributes the fact that the Los Angeles Times carries so much television news to the interest of Hollywood readers in the area. He also learned that "VEA" as in KVEA, the Spanish station on channel 52, is Spanish for "look at," so their slogan, "VEA 52" really means "look at 52."

Another more recent article on the SIN situation just in. This is an editorial, stating that the FCC decision to not renew the licenses of the SIN affiliates may work out for their benefit. It would force them to find American Latinos who are willing to invest in the stations. One reference to foreign influence is the daily news program, "24 horas," which is produced in Mexico City and has an obvious slant toward the Mexican government.

As a result of his acquisition of MGM/UA Entertainment, Ted Turner could be forced to pay high dividends on stocks until they are redeemed. This would be unlikely, but should it happen, he could very well lose control of Turner Broadcasting System in a few years.

KNBC-TV, ch. 4 in Los Angeles, beat NBC in reporting the explosion of the Space Shuttle Challenger. Because of that region's interest in the aerospace industry, the station interrupted the "Today" show for the launch. Viewers of KNBC and of Cable News Network, which also carried the launch, saw the incident as it happened.

Robert Goodman writes, "I was surprised to find WPIX-TV being repeated on channel 17 here (Bronx, NY -wbf)....W17AC had been on since Jan. 3. Since WPIX-TV (11) had gone to

the World Trade Center and discontinued their old X1tr on channel 73, viewers in mid-town Manhattan had suffered." "W17AC is on the Empire State Building and has a 30° wide beam pointed uptown (approx WNE) to fill in the shadow cast by the ESB from WTC. It takes 1 kw final input, delivering 6.8 kw ERP, horizontally polarized, with aural as 10% of the total. Uses direct feed, not repeating (over the air -wbf)." WNET-13 is also considering a repeater on the Empire State Building. "According to Glenn Hauser, Sri Lanka has inaugurated TV: VHF, system unknown."

Newspaper clippings from Bob Hempel: KOIA-TV, ch. 17 in Ottumwa, IA, plans to sign on the air in early February. KOIA is the former LPTV on ch. 42 that went off the air in August, 1985. Also, KCBR-TV, channel 17 in Des Moines, changed its call sign to KDSM-TV. Included was a new logo, which I will hold off on printing because of possible problems with glue-ons with the new publisher. Maybe next month.

Randy Miltier writes about Gene Scott's former station in San Francisco. "The station is now KWBB...and, so far, all they carry is...Dr. Gene Scott! I turned it (him) on today and he was pushing satellite dishes. He told everyone that if they purchased this dish they could receive him 24 hours a day. According to an article in the 1/14 San Jose Mercury News, Gene Scott rents time on channel 38 from 9 p.m. to 6 a.m. every night, and also during the daytime on Sunday. "He has that time because, just as he said when he lost his license to run Channel 38 last year, the new owners have no studios, no transmitter and no programming. So they are selling time to the good doctor rather than run 24 hours of snow." The owners of the station are not divulging any information about their plans for the station.

From the 1/28 San Jose Mercury News, a report that KQEC, ch. 32 in San Francisco, is now programming a new schedule different from KQED-9, which it used to repeat. KQEC is now broadcasting adult educational programs in the late afternoon, current events and politically-oriented programs during prime time, and children's educational programs on Saturday afternoons. KQED, which owns KQEC, had wanted to make the change earlier, but was unable to because of the extra cost it would require. But with a record \$22 million, it is now able to. Also, the abolition of the must-carry rule made it necessary to make the station worth carrying by cable companies. Another incentive was that several groups had challenged KQED's license to operate KQEC.

Bill Johnson reports that WFBN, ch. 66 in Joliet, IL, is now WGBO-TV as of 1/1/86, and is advertising 5 million watts ERP. The station supposedly applied for call letters WGBN-TV according to Television Digest, and the station had been licensed for 5 million watts since it first went on the air in 1981. It could be that they were operating under reduced power for a while. Has anybody seen increase in signal strength on the station, and can anybody confirm the new call letters as either WGBO-TV or WGBN-TV?

Follow-up on the report about KOSHU in Houston, TX. Donald D. Marshall reports, "...KOSHU is now on Satcom 4, transponder 18. They showed up just before Christmas." "They were going to be on 24 hours 7 days a week and...were going to get a 1-800 number to take requests. They also ID as TV-5 but their main title is Video Hits U.S.A. and they are stereo.

Dave Nieman writes, "I still haven't seen any positive sign of WTZA-62 Kingston, NY; thought it would be seen much of the time. Its signal here is like WTEY-54 Poughkeepsie's; nonexistent. It must be because of the Hudson River Valley." Also a short clipping from the Buffalo news, speculating that WNYB-TV, ch. 49 in Buffalo, might be planning to go on the air soon: the station had begun purchasing syndication rights to a cartoon series and movies.

As I promised, more international news this month. Richard Clark from the Dominican Republic, reports on the Caribbean and Central America. WKPV, ch. 20, Ponce, PR, went on the air 10/85, WAPA-TV network. WUJA, ch. 58 in Caguas, PR, went on 12/4/1985, and is TBN. (What is that? -wbf) W58AA in Caguas, as a result, had to shut down. Other new stations include ch. 13 in Nevis, St. Kitts, which is on 24 hours; ch. 21 in Guatemala City, Guatemala. Under construction are ch. 5 in St. George, Grenada; ch. 13 in Tegucigalpa, Honduras, and a yet unknown channel in San Salvador, El Salvador. Also, WRWR-TV, ch. 30 in San Juan, PR, is on the air with movies only. WSJU, ch. 18 in San Juan, is now stereo.

Fred McCormack says that KTHI, ch. 11 in Fargo, ND, was off Jan. 11-15 because of transmission line problems. But local cable companies were able to establish a link with NBC network programming. On 1/12, CBS affiliate KXJB-4 broadcast NBC coverage of the AFC football game.

CANADIAN NEWS

Several reporters this month with news from Canada. To start, here is the regular report from Walter Patton from the Canadian Gazette. Walter writes, "The change of CKVU Vancouver from Ch 21 to 10 is dependent upon there being no interference to cable reception of KCTS (9) Seattle WA on BC (British Columbia -wbf) systems; the CKVU transmitter and the cable headend are both located on Saltspring Island. There were 30,000 signatures on a petition to the Commission protesting the CKVU channel change. The folks in Vancouver take their PBS viewing seriously. About two thirds of the money raised by KCTS's 'begathon' comes from BC. A few years ago KCTS even tried to put a transmitter on Orcas Island (Ch 34 Bellingham) but were forced to withdraw when sufficient funds were not available."

NEW STATIONS:

QUE Montreal; ch. 35; 566 kw; Four Seasons; French language station. Competing application by Television de Montreal denied. QUE Wakeham; ch. 24; 0.1 kw; to repeat CBMT, ch. 6, Montreal (CBC)

CHANGES GRANTED:

BC Vancouver; CKVU-TV; ch. 21 to 10; 880 kw to 285 kw; see note above.
 MB Dauphin; CKYD-TV, ch. 12; 63 kw to 50 kw; replace tower destroyed in March, 1983.
 MB Brandon; CKYB-TV, ch. 4; 55 kw to 45.16 kw; replace tower destroyed in March, 1983.
 MB Brandon; CKX-TV, ch. 5; 44 kw to 41.7 kw; replace tower destroyed in March, 1983.
 ON Owen Sound; CICA-TV-12; ch. 12; 41 kw to 52 kw.
 PQ Iles de la Madeleine; CBMYT, ch. 7, to rebroadcast CBMT (6) Montreal instead of CBC Anik; 2.9 kw.
 PQ New Carlisle; CBVN-TV, ch. 45; 5.19 kw to 5.32 kw.
 PQ Trois Rivières; CHEM-TV, ch. 8; 5.12 kw to 123.2 kw.
 SA Debden; CBKFT-3, ch. 22, to rebroadcast CBKFT (13) Regina instead of CBWFT (3) Winnipeg; 2.9 kw.
 SA Gravelbourg; CBKFT-6, ch. 39; same as above; 19 kw.
 SA Leoville; CBKFT-11, ch. 31, as above; 10.7kw
 SA Moose Jaw; CBKFT-10, ch. 16; as above; 0.695 kw.
 SA North Battleford; CBKFT-12, ch. 41; same as above; 10 kw.
 SA Ponteix; CBKFT-7; ch. 22; same as above; 19.4 kw.
 SA Prince Albert; CBKFT-2; ch. 3; same as above; 13 kw.
 SA St. Brieux; CBKFT-4; ch. 7; same as above; 0.14 kw.
 SA Saskatoon; CBKFT-1; ch. 13; same as above; 98 kw.
 SA Willow Bunch; CBKFT-8; ch. 21; same as above; 9 kw.
 SA Zenon Park; CBKFT-5; ch. 21; same as above; 6.9 kw.
 SA Regina; CBKFT, ch. 13; no longer repeating CBWFT, ch. 3, Winnipeg, Manitoba.
 NW Pine Point; CBEBT, ch. 4; reduced from 7.9 kw to 0.262 kw.
 NW Inuvik; CHAK-TV, ch. 6; reduced from 3 kw to 0.122 kw.
 ("As outlying transmitters in the Yukon and Northwest Territories begin to be fed directly by satellite they no longer require a high or medium power station from which to receive their signal. As a result the power of these central transmitters is being reduced and it will become much more difficult to DX either of these areas.")

CALL LETTERS:
 AT High Prairie; ch. 13; CIRE-TV (I don't have any information at all on this station. -wbf)
 NF Gillams; ch. 13; CBYT-12
 NF Hampden; ch. 13; CBNAT-23
 NB Memramcook/St. Joseph; ch. 48; CICIW-TV
 ON Barry's Bay; ch. 19; CBOT-2
 ON Maynooth; ch. 51; CBOT-4
 PQ Montreal; ch. 62; CFTU-TV.

APPLICATIONS:
 ON Woodstock; ch. 31; 70.6 kw; to repeat CITY, ch. 57 in Toronto.
 APPLICATIONS FOR CHANGE:
 NS Yarmouth; CBHFT-1; ch. 3; 1.9 kw to 19.5 kw
 BC Fort Nelson; CBUGT; ch. 8; 0.05 kw to 1.07 kw.

From David A. Sinclair in Vancouver, B.C., several newspaper articles. From the 1/9/86 Globe and Mail, a national newspaper, an article on a proposed Canadian "superstation." The station referred to is CBET in Windsor, Ontario. "The CBC plans to penetrate the U.S. market with a 'superstation' that would send Canadian programs-made by private and provincial networks as well as by the CBC-by satellite to cable companies throughout the United States. According to the plan...the CBC would transform its Windsor station into a so-called superstation...." "The proposal would have to be approved by the Canadian Radio-Television and Telecommunications Commission." "The proposed channel would send the CBC's normal schedule of news, current affairs, documentaries, drama, science and children's programs deep into the U.S. market. Canadian private broadcasters, such as CTV and Global, and the National Film Board and provincial educational networks, would be invited to join the network. But if they show no interest, the CBC would proceed alone. CBC's French-language network, Radio-Canada, would not be involved in the channel...." "CBC's Windsor station was chosen because of its unique situation within the public network's string of owned-and-operated stations. Because it is so close to the large Detroit market, CBET is not permitted to broadcast many popular U.S. programs...." "For Canadians outside Windsor, the new channel would mean they would be able to receive two CBC networks."

From the Winnipeg Free Press, opposition from the CBC and CTV to a proposal by a cable television company to change its list of American stations offered. "Winnipeg Television stations could face dire consequences if a federal agency allows Detroit satellite signals into the city, the CBC and CTV networks say. In separate briefs to the Canadian Radio-Television and Telecommunications Commission, the networks have registered strong opposition to a proposal by Winnipeg's cable companies to replace North Dakota signals with those from Detroit." "Four Detroit major market superstations in a single local Canadian market is drastic and unfair competition for the local broadcaster," said Gordon Noble, CBC's director of corporate affairs. Noble said there is a serious danger that viewers will watch substantially less Canadian television if the applications are granted, when a similar application was approved in Saskatchewan, the market share for the U.S. stations increased from 10 to between 20 and 30 per cent, he said. "Greater Winnipeg Cablevision is applying to replace its North Dakota feeds with all three major American networks from Detroit as well as the Public Broadcasting Service in Detroit. It says Detroit signals are stronger and better quality."

Two articles from the Vancouver Province, dated 1/27/86, report on a pay-TV problem in that area. It involves a Bellingham, WA, television station owned by Charles Griner, and a pay-TV service, Selec-TV of California. Dan Forrer rents the facilities to air the

pay-TV service. He also owns Selec-TV Antenna Sales, a Canadian corporation with no connection at all with Selec-TV of California. While viewers in the United States have to pay monthly for decoders to watch Selec-TV, he has the freedom to sell antennas and decoders to people in Canada. Nearly 200 Canadians forked over about \$300 for the equipment and about \$70 for installation. But the signal from the Bellingham transmitter was cut off after only six months of service when its owner cancelled his contract with Forrer. Forrer still claims that the movie channel will be back on the air soon. Meanwhile, the federal consumer and corporate affairs department is checking Forrer's business out.

From the 1/9/86 Vancouver Sun, "The CBC wants to reduce sports coverage, eliminate all U.S. commercial TV programming from its English-language network, establish more specialty channels and step up its commitment to Canadian drama." "The CBC also wants to extend this profile south of the border by setting up a 'superstation' to send Canadian programming by satellite to cable companies south of the border. Among the key recommendations: Elimination of all U.S. commercial TV programs on the CBC English network by Sept. 21, 1987, apart from 'certain high quality' programs not generally available. This would raise the Canadian content level to 90 per cent.... Establishment of a second CBC-TV channel to showcase programming from the regions and provincial broadcasting organizations such as Alberta Access and TV Ontario. This second channel would also offer 'second chance' viewing of popular programs offered on the main service."

The 11/30/85 Winnipeg Free Press gave more detail on the switch of U.S. network affiliates to be carried by a Winnipeg cable company. Actually, it includes Videon, another cable company there. Reasons for the changes are given in detail. Firstly, they can receive a better signal of the Detroit stations by satellite than the North Dakota station over the air. The North Dakota stations argue that the difference is insignificant. Secondly, there is increased viewing time. The Detroit stations are mostly 24-hour operations while North Dakota stations offer 16 to 18 hours. A third factor involves time zone and programming differences. Detroit is in Eastern time zone, and North Dakota is central, but there is no difference with network programming, since Central time zone stations and Eastern stations broadcast simultaneously. But the North Dakota stations point out their coverage of Winnipeg sports, calendars of Canadian events, and weather reports that are relevant to Winnipeg. Prairie Public Television claims that 27 programs now shown on their station will not be available on WTWS, the Detroit PBS station, but Cablevision maintains that WTWS carries a higher quality programming because of its larger audience.

Paul Gaines also sent an article about the proposed Canadian Superstation, CBET, ch. 9 in Windsor. "The Windsor station was chosen because of its unique programming schedule. Located just across the river from the large

Detroit market, CBET is not permitted to broadcast many popular U.S. programs shown on the CBC's other stations, because Detroit stations have the air rights. As a result, CBET's program schedule is heavily Canadian. "While independent television producers in Canada have lauded the CBC's plans, American television producers are less enthusiastic. A top-level executive of the (PBS) quoted in the Toronto Star, said that if the 'superstation goes on the air, PBS will have to drastically reduce the number of programs we buy from Canadian suppliers.' "At least one Canadian television executive also has come out against the plan. John Bassett, a former chairman of Baton Broadcasting, which owns the largest independent television station in Canada, CFTO, called the plans for a superstation a 'pipe dream. Canadians don't watch Canadian content generally. They watch American shows,' he said. CFTO, which broadcasts in the Toronto market, carries about 90% American programming and regularly beats the Toronto CBC affiliate in prime-time ratings.

Bruce Elving sent an article a few months back from the 7/26/85 Toronto Star about stereo television in Canada. "Canadian programmers say they're in no hurry to start broadcasting in stereo. Starting tomorrow, Toronto's Channel 47 becomes the first Canadian station to offer viewers enriched sound. But CBC-TV sources say the network commissioned a study by its engineers and is not rushing into the market. CTV says it has no plans to broadcast in stereo."

I think this spacing problem with my typewriter is progressively getting worse.

CONSTRUCTION PERMITS REINSTATED

FL Panama City; WMJA, ch. 28.

CONSTRUCTION PERMITS CANCELLED

KS Topeka; KKEC, ch. 43
GA Brunswick; WHJF, ch. 21
MO Sikeston; K DCQ, ch. 45
MT Lewiston; KMEC, ch. 13
NM Gallup; KIEB, ch. 3

APPLICATION REINSTATED

TX Katy; ch. 51; Louise Bronson.

APPLICATIONS FOR NEW TELEVISION STATIONS

CH ERP HAAT STATE/CITY/APPLICANT
63 4100 1158 NJ Newton; Bogner Newton Corp. (amended)
29 33.1 1519 CA Eureka; Charles M. Lohr
22 221 747 MN Brainerd; Northern Minnesota Public Television Inc.
65 3981 2146 VA Blacksburg; Cascade TV Ltd.
41 250 1156 VA Charlottesville; Central Virginia ETV Corporation
32 1330 1670 CA San Francisco; Minority Television Project (application back in 1983, reinstated.)
50 5000 967 CO Denver; Gali Communications
59 5000 1156 CO Denver; Don T. Moore
66 1778 1294 NJ West Milford; New Jersey Public Broadcasting Authority.

APPLICATION RETURNED

FL Miami; ch. 35; Kilgore Broadcasting (too close to WBFS-33?)

APPLICATIONS DISMISSED

UT Salt Lake City; ch. 13; Intermountain Broadcasting Inc.; Mountain West Television Company; Utah Television Associates Limited Partnership; West Valley City Television Associates Ltd. Partnership (specified West Valley City).
CA Eureka; ch. 29; Sacramento Valley Television Inc.; Capitol Foothills Broadcasters.
NV Reno; ch. 11; Reno Telecommunications.
NJ Burlington; ch. 48; Burlington TV Inc.
VA Roanoke; ch. 60; Brahm Communications; Roanoke TV 60 Broadcasting.
CA Bakersfield; ch. 48; Gamez Communications Ltd Partnership.
FL Clermont; ch. 68; Big Chief Broadcasting; Non-Pr ofit Television Concepts.
FL Miami; ch. 35; Canal 35 Ltd.
FL Palatka; ch. 63; American Communications & Television Inc.
FL Venice; ch. 62; Venice Communications Ltd. Partnership.
HI Honolulu; ch. 5; Family Media Inc.
LA New Orleans; ch. 49; Albert Inc.; Horizon Broadcasting Inc.; NOLA TV.
ME Presque Isle; ch. 62; Allan M. Weiner.
NV Reno; ch. 11; Gloria Hammers.
LA Baton Rouge; ch. 44; Louisiana Super Communications; Baton Rouge Channel 44 Ltd. Partnership (Review Board, upholding initial decision).
FL Miami; ch. 35; Coral Way Broadcasting Ltd; Cuban-American Ltd; Adib Eden Sr.; First Latin women Broadcasting Inc.; Grace Broadcasting Network Inc.; Lamar Communications Inc.; Miami Broadcasting Inc.; Miami 35 Corp.; Minority Broadcasting Corporation Inc.; Range Communications Limited Partnership; Spanish Broadcasting Corporation. (Initial decision)
MS Wiggins; ch. 43; South Mississippi Broadcasting Company Inc.
AK Anchorage; ch. 5; Minority Broadcasters of Alaska.
CO Castle Rock; ch. 53; Castle Rock Communications Ltd.; Virginia Cordova Kelso & Daniel Cordova; Dorothy O. Schulze.
FL Gainesville; ch. 61; American Communications & Television Inc.
KS Pittsburg; ch. 14; Family Broadcasting Company, Inc.

CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS
13 8 3881 UT Salt Lake City; Salt Lake City Family Television Inc. (Review Board decision)
62 5000 625 IN Hammond; Jovon Minority Broadcasting Corp. (FCC decision, confirming the Review Board's reversal of the initial decision)
44 5000 1975 LA Baton Rouge; Parish Family Television Ltd. Partnership (Review Board decision)
65 5000 859 VA Ashland; Christian Communications Inc. (Summary decision)
35 5000 1174 FL Miami; Miami Latino Broadcasting Corporation (initial decision)
53 5000 965 CO Castle Rock; Christal Communications Corp.
61 3444 936 FL Gainesville; Gator Broadcast-

ing Limited Partnership
14 5000 204 KS Pittsburg; John N. Leiland

APPLICATIONS TO MODIFY CONSTRUCTION PERMITS
41 205 297 LA Alexandria; KBCA
65 3090 2651 CA San Jose; KLVN-TV
28 500 438 FL Panama City; WMJA (which had been reinstated)
53 1250 1169 TN Cleveland; WFLL-TV
21 4207 n.c. VA Lynchburg; WJPR
16 5000 507 MO St. Joseph; KTAJ
55 5000 731 NY Amsterdam; WOOD
49 4136 1235 NY Buffalo; WNYE-TV
55 2890 1504 PA Lebanon; WGGF
58 5000 1962 CA Stockton; KSCB-TV
44 2138 975 TX Harlingen; KLUJ (is this one? I have it licensed, with an ERP of 9.2 kw, but no sign on date.)
63 5000 1040 IN Bloomington; WIIB
41 205 297 LA Alexandria; KBCA
50 1200 486 NY Watertown; WJCK
51 3011 917 ME Portland; WPXT
36 515 502 TX Odessa; KOCV-TV
20 100 849 PR Ponce; WKPV

CONSTRUCTION PERMIT MODIFICATIONS GRANTED
35 5000 1368 IL La Salle; WFTO-TV
16 5000 507 MO St. Joseph; KTAJ
32 105 971 PR Aguadilla; WKKU (correction of last month's figures)
52 1355 601 OK Oklahoma City; KSBI
68 1442 1029 AL Birmingham; WCAJ (as amend.)
62 2221 454 MA Lawrence; WMFP

APPLICATIONS TO CHANGE EXISTING FACILITIES
10 316 1953 CA Sacramento; KKTV (CP)
43 5000 1071 OH Lorain; WUAB (CP)
55 5000 1691 FL Leesburg; WIYE (MP)
19 4646 n.c. OH Cincinnati; WXIX-TV (MP)
7 316 1869 SC Charleston; WITV (MP)
7 316 1947 LA Lake Charles; KPLO-TV (as amended; CP)
33 5010 1995 MO Springfield; KSPR (CP) Is the FCC going to pass that ERP?
11 316 2000 AZ Tucson; KMSB-TV (CP)
14 5000 1876 LA West Monroe; KARD (CP)
22 5000 2000 NC Raleigh; WLF L-TV (CP)
8 79.4 580 OK Sayre; KVIJ-TV (CP)
5 60.3 2700 OR Medford; KOBI (lic mod)
9 316 827 WA Seattle; KCTS-TV (CP)
13 316 1950 CA Stockton; KOVR-TV (CP)
15 2630 1180 LA Lafayette; KADN (CP)
17 1000 1300 MN St. Paul; KTG1-TV (CP)
52 60 1080 NH Keene; WEKW-TV (CP; also applied for STA to operate at 50% power)
58 1321 726 NJ New Brunswick; WNJB (CP)
57 2630 1560 KY Hazard; WYMT-TV (MP)

FACILITIES CHANGES GRANTED
FL Leesburg; WIYE, ch. 55; granted MP to raise antenna to 1691.1' AAT/1670' AG/1724' ASL.
WV Clarksburg; WBOY-TV, ch. 12; granted CP to raise ERP from 129 kw to 262 kw.
NC Concord; WUNG-TV, ch. 58; granted license to cover CP for changes; see 6/85 VUD.
AR Little Rock; KARK-TV, ch. 4; granted license to cover CP for changes; see 11/85 VUD.

FL Jacksonville; WJCT, ch. 7; granted license to cover MP for changes; see 5/84 VUD.
SC Columbia; WLTX, ch. 19; granted license to cover CP for changes; see 8/84 VUD.
WV Clarksburg; WBOY-TV, ch. 12; granted CP to reduce antenna height to 860' AAT/572' AG/2024' ASL (21' lower); raise ERP from 129 kw to 262 kw max.
SC Charleston; WCBT-TV, ch. 2; granted MP to change antenna height to 1950' AAT/1940' AG/1957' ASL (1108' higher ASL); TL to Awendaw Section, Seewee Road, 4 miles northeast of Ten Mile, Charleston County; coordinates 32°56'24"/79°41'25"; Azimuth 51°, 15.52 miles from present TL.
CO Durango; KREZ-TV, ch. 6; granted license to cover CP for changes; see 12/85 VUD.
SC Charleston; WCSC-TV, ch. 5; granted MP to change ERP from 100 kw to 100 kw max; 1960' AAT/1956' AG/1970' ASL (923' higher ASL); TL to 3.4 miles northeast of Ten Mile, east of Hwy 17-701, Southeast of its intersection with Seewee Road (same TL planned by WCIV-4 and WITV-7); coordinates 32°55'28"/79°41'58" (Az. 43°, 12.11 miles from present TL).
MO Kansas City; KOPT, ch. 19; granted license to cover CP for changes; ERP raised from 984 kw max/868 kw hor to 1042 kw max; 1170' AAT/1192' AG/2019' ASL (same AAT, 30' lower ASL); same TL.
NY New York; WCB3-TV, ch. 2; granted license to cover CP for changes; ERP reduced from 42 kw to 21.38 kw max/20.32 kw hor; 1578' AAT/1577' AG/1622' ASL (278' higher AAT/112' higher AG/107' higher ASL); TL to #1 World Trade Center; coordinates 40°42'43"/74°00'49" (2 miles SSW of former TL on the Empire State Building).
CO Montrose; KREY-TV, ch. 10; granted license to cover changes; ERP raised from 3.09 kw to 6.16 kw max; 115' AAT/94' AG/6374' ASL (35' higher AAT but 18' lower AG and ASL); same TL.
NY Syracuse; WCNY-TV, ch. 24; granted license to cover MP for changes; see 8/84 VUD.

CALL LETTER APPLICATIONS: NEW STATIONS
CH C.L. STATE/CITY/APPLICANT
2 KDTN TX Denton; North Texas Public Broadcasting Inc.

CALL LETTER APPLICATIONS: STATIONS ON THE AIR
66 WGBO-TV IL Joliet; WFBN (This explains the discrepancy reported in FORUM, where I had record of WFBN applying for WGBN-TV)
33 KDAF TX Dallas; KRLD-TV
5 WNYW NY New York; WNYM-TV
24 KAZR AR Fort Smith; KPOM-TV

CALL LETTERS GRANTED: NEW STATIONS
28 KOOR IA Cedar Rapids; Metro Program Nt.
65 WLXW MD Cumberland; Gary D. Terrell
35 WUCX-TV MI Bad Axe; Delta College
51 KFAA AR Rogers; MCC Communications
59 KBEL CA Big Bear Lake; Felice-Tec
68 WCOB-TV OH Mansfield; WLCH
19 KCUA NM Santa Fe; CRA Broadcasting Limited Partnership

CALL LETTERS GRANTED: CHANGE EXISTING
 11 KMSE-TV AZ Tucson; KZAZ (not KSME, as was reported in the 8/85 VUD)
 26 WGBA MI Green Bay; WLRA
 39 WHTN TN Murfreesboro; WFPZ
 27 WHLL MA Worcester; WSMW-TV
 3 WMMT MI Kalamazoo; WKZO-TV
 17 KMIZ MO Columbia; KCBJ-TV
 17 KDMS-TV IA Des Moines; KCBR
 66 WGBO-TV IL Joliet; WFBN
 11 WLIJ PR Caguas; WKBM-TV

NEW STATIONS ON THE AIR

PR Mayaguez; WTRA, ch. 16z; signed on 12/14/85, as per report by Richard Clark; 90 kw max/30 kw hor ERP; 1123' AAT/133' AG/1347' ASL; TL Road #711, post 0.7 km, on Mt. Atalaya, Aguada; coordinates 18°19'06"/67°10'42" (same coordinates for WJXJ-TV, ch. 22); Application was originally by Ramon R. Nieves, who proposed it to be a satellite of WRWR-TV, ch. 30, San Juan. Both stations have since changed ownership. WTRA now owned by New Saga Inc.
 PR Ponce; WKPV, ch. 20z; 102 kw max ERP; 822' AAT/94' AG/2063' ASL; TL Az. 315° (that's due NW) of Penueles; coordinates 18°04'46"/65°51'11"; coordinates match those for WTTN-14, WQTO-26 and WIEC-48. Station signed on sometime in 10/85; affiliated with WAPA-TV network; owned by Multi Media Television Inc.
 PR Caguas; WUJA, ch. 58z, signed on 12/4/85; 55 kw max ERP; 1078' AAT/110' AG/1782' ASL; TL northwest of Caguas on Rd #173; coordinates 18°16'40"/66°06'38". Educational station, owned by Community Television of Caguas.
 AL Montgomery; WMCV-TV, ch. 45-, signed on in November, 1985; 250 kw max ERP; 303' AAT/319' AG/513' ASL; TL along Hwy 80, 3 1/2 miles east of Montgomery; coordinates 32°22'59"/86°11'19"; independent station; address: Life Anew Ministries Inc., 6261 Atlanta Highway, Montgomery, AL, 36117.
 AZ Phoenix, KUTP, ch. 45z; signed on 1/1/86; 3020 kw max ERP; 1792' AAT/348' AG/2966' ASL; TL on South Mountain Park, 8.3 miles south of Phoenix; coordinates 33°20'01"/112°03'32"; coverage should be slightly greater than KTVW-TV, ch. 33. Address: United Television Inc., 4631 S. 32nd St., Phoenix, AZ, 85040.
 IL Quincy; WTJR, ch. 16+, signed on 1/1/86, but there was a report of it testing on 8/6/85; 179.2 kw max ERP; 994.45' AAT/880' AG/1620' ASL; TL Columbus Road, 2 mi. north of Quincy; coordinates 39°57'03"/91°19'42"; Address: Believers' Broadcasting Corp., Box 3112, Quincy, IL, 62305.
 MD Baltimore; WKJL-TV, ch. 24+; data reported last month; address: Family Media, Inc., 4820 Seton Drive, Baltimore, MD, 21215.
 TN Greeneville; WETO, ch. 39-, went on the air 11/8/1985; 3000 kw max ERP; 2628' AAT/141' AG/4981' ASL; TL to Camp Creek Rd., Bald Mountain; coordinates 36°01'24"/82°42'56"; Address: East Tennessee's Own Inc., Box 1074, Greeneville, TN, 37744.
 AL Mobile; WMPV-TV, ch. 21+, went on in December, 1985; 4335 kw max ERP; 1428' AAT/

1401' AG/1534' ASL; TL on Rte 97, 0.9 mile south of Rte 10, Elsanor; coordinates 30°35'18"/87°33'16"; coordinates 30°35'18"/87°33'16"; same coordinates as WJTC, ch. 44 in Pensacola, FL; with ERP much higher and AAT only slightly lower, it should produce a clearer signal than WJTC; address: Rel-Way Partnership, 4141 Pine Forest Road, Suite 109, Cantonment, FL, 32533; independent station.
 IA Ottumwa, KOIA-TV, ch. 15+, is expected to go on the air sometime in February, according to an article sent in by Bob Hempel; the station had formerly been operating as K42AM, which went off the air in 8/85.
 DE Wilmington, WBOT-TV didn't make its target of January, 1986; look for it any day now.
 CA Sacramento, KSCN-TV, ch. 58, targeted for March, 1986.
 PR Caguas; WKBM-TV, ch. 11, targeted for March or April, 1986
 PR Ponce; WSRU-TV, ch. 9, also targeted for March or April. Both owned by American Colonial Broadcasting Corp.

FORUM, PART TWO

I would like to make a few comments on Morrie Goldman's letter on p. 17 of last month's VUD. He suggested such ideas as a computer bulletin board, and a computerized TV STATION GUIDE that could be updated each year. Presently, I have been working on such a list, but it's nowhere near complete, so I haven't suggested any plans for printing a new TVSG. I know of a few club members who have Commodore 64 and 128 computers, such as Tom Yingling, Don Blevins, and John Combs, and myself. And there may be others. The two lists I've been working on are (1) List by state, city, callsign, with networks but with no technical data, using Speedscript, a word processing program by COMPUTE! The modified version of Speedscript that I use can print single-spaced. (2) List by channel, state, city, using MULTIPLAN, a spreadsheet program.

I also want to give a special thanks to Larry Fuss for sending me a complete data base of U.S. stations with Canada and Mexico within 250 miles. It filled in many gaps in my own records, and updated several areas that were outdated. As a result, this month's column is much more accurate, as will future columns. And I'm about ready to throw out his typewriter.

From Tom Yingling, an article from the 12/5 Baltimore Evening Sun. WBFV-TV, ch. 45, is in the process of receiving approval from several government agencies to construct a transmitter tower Druid Hill Park. WBFV offered \$25,000 a year donation for upkeep of the park. The Board of Recreation and Parks approved of the idea, but a private group called "Friends of Druid Hill Park," are opposed to the approval. With friends like that.... From the 12/18/85 Evening Sun about WKJL, ch. 24, "It will go on the air at 6 o'clock Christmas morning with its standard fare which will include a lot of religious programming, a variety of old chestnut series and a few pretty expensive

syndicated network rerun programming. Channel 24 started out some eight years ago as a license (sic) given to a group called Jesus Lives, Inc. that was going to put a Christian-oriented station on the air. That group eventually handed the license over to another such group called the Look Up and Live Ministry that also failed to raise the needed capital to get the station off the ground. Neither group could find a suitable place to build an antenna. So it's coming on the air, just under the dead line required by its license (sic), with its antenna finally fixed to the one owned by Channel 54 (WNUV), as the property of a newly formed group called Family Media, Inc. That's a company that has no specific religious affiliation, but the principal in Family Media is Sam Moore, who is also the principal in Thomas Nelson Publishing, a big religious publishing house in Nashville, Tenn. "We're going to be an independent television station in the Baltimore market," Ken Buschman, the new station's general manager, said yesterday. "We're going to be a viable alternative offering family programming. You can describe our philosophy as the whole-man concept. We hope to educate, to teach, to inspire, to provide all the other things that a person may need. But we will be a real, commercial independent station."

Bob Seaman, who wrote a few months back and just recently joined the club, sends some more information on television in the Hazleton, PA, area. "Apparently WDAU Ch. 22 in Scranton, PA has installed a new transmitter in the beginning of October, but their signal strength has not changed at all, apparently their ERP is unchanged. Their signal has always been marginal here in Hazleton, PA which is about 45 miles from their transmitter. Is their ERP 750,000 or is it higher?" (try 1560 kw -wbf) Bob noted that and a different figure, both either wrong or outdated, in TV Factbook and Broadcast Yearbook. Man, this typewriter has to go! He also reports that WOLF-38 in Scranton, hopes to raise their antenna another 300' in the future. WWLF in Hazleton, ch. 56, hopes to raise their ERP around the same time.

Bob asks for some advice in setting up so me equipment. "I plan to put a UHF amp on my antenna and I have 300 ohm foam twin lead on it presently. Should I change to 75 ohm cable for UHF?" From what I have heard, 75 ohm is better. "Our local supplier stocks Blonder-Tongue U-2 amplifiers for about \$40. Is that a good unit or should I get something else?" I can't answer that, but here's hoping some WFD member will add some of their thoughts on a good preamp. Bob sent an article from the 1/24/86 Philadelphia Inquirer. "With Big 5 college basketball heading toward the home stretch, the chances of any local games being seen this season are fading faster than Michael Jackson. Hang it up, sports fans. It's over. When the Big 5 and channel 61 announced their five-year, 75-game package in September, it was with the optimistic understanding that the Wilmington-based

station would be on the air by Dec. 1. No such luck. After countless construction delays, the latest target date for the station is Mar ch 3, according to Daniel G. Slape, Channel 61 president and general manager." David A. Sinclair gives the story on KONG-TV, ch. 16 in Seattle. "This station was scheduled to come on air Feb. 1/84 and have the original King Kong movie. This did indeed upset KING-TV. KONG-TV has not yet come on air. I phoned KONG-TV and they hope to come on the air by May 1/86. Two articles sent in by David explain part of the problem. Cougar Mountain residents are upset about the construction of KONG's transmitter tower on the mountain, which already has 22 antennas on it. Although the EPA says that levels of radiation are safe, residents complain about TV signals coming through the telephone lines, VCR's, lights that don't work, radios that play when switched off, and hearing music in their heads. Other news clippings report that KORG, ch. 24 in Anacortes, WA, hopes to be on the air 3/1/86 with a badly needed ration of movies and old syndies for viewers.

Some articles from Paul Gaines. Knight-Ridder (not named after the TV series) will be purchasing some of the television stations which Gannett Co. just bought from Evening News Association. The stations are in Mobile AL, Tucson AZ, and Oklahoma City. Since buying out the Evening News Association, Gannett had too many stations and was required by the FCC to sell some of them. Capital Cities, which also has to sell some of its newly acquired stations, is selling WXYZ-TV (ch. 7, Detroit) and WFTS-TV in Tampa, FL, to Scripps-Howard. The FCC has allowed, for the time being, Storer Communication's Inc. to keep its Cleveland and Detroit stations even though their coverage areas overlap. Most of the overlap area is over Lake Erie. Overlap between the Cleveland and Toledo stations cover about 128,000 people, but since that situation existed before the 1964 rule barring such overlap, SCT has been allowed to keep both stations. The stations referred to are WJBK-TV in Detroit, WTWG-TV in Toledo, and WJKW-TV in Cleveland. After more than 50 years at Rocker feller Center, NBC is about to move its production facilities elsewhere. It now operates from a building about five blocks away, but is still searching for a permanent location.

That's about it for this month. If I can't get this typewriter fixed, it too will be searching for a permanent location, and I'll give you three guesses where. I heard that a Hammon, NJ LPTV station, W08CC, was scheduled to go on the air in January, but latest report at the end of that month had the owners calling in some experts from Nebraska to get the equipment working. WNEP-TV, ch. 16 in Scranton, now has a new translator: W26AD, located in Allentown-Bethlehem area. Don't know how strong it is.

FEEDBACK

MEMBER GREG HARDISON
RESPONDS TO JANUARY VUD;
ABC TALKRADIO'S DX SPECIAL
WAS NOT "ALL SHORTWAVE"

After the tremendous effort put forth by the club in promoting the Ray Briem DX Special of December 7, 1985; I was rather shocked to see the blatant disinformation placed on Page 2 of the January VUD, regarding that particular program. It's fairly obvious that the author of that paragraph either A) did not bother to actually listen to the show, or B) had no comprehension of what he or she was hearing.

The sentence I'm referring to reads thus: "If you caught the Ray Briem Show...once again we were treated to an all shortwave DX special." This is a false statement--nothing less. First of all, I'm appalled that the WTFDA chooses to completely discount the contributions of Dr. Bruce Elving to our show. Bruce was on the line for just over three hours; admittedly, we did not have enough time to devote sufficient coverage to any one aspect of DXing--but, the fact remains that Bruce received more calls, on an individual basis from listeners, than Stewart Mackenzie of the ASWLC--who was in studio for all 5 hours. As a producer, I felt certain this would be the case...and (in one segment) Bruce mentioned the WTFDA by name. This surely doesn't seem like "all shortwave" to me. In addition, that asinine phrase discounts other emphasis which was placed on mediumwave, longwave and satellite DXing. Again, regrettably, our time was limited. But you have to realize that the show was not designed strictly for the few thousand DXers in the country, exclusively. We cannot realistically expect to produce such a specialized program, without taking into account the perceptions and listening-needs of the tens of thousands of our regular (read: non-DXing) audience. It would have been completely unrealistic of you to expect us to devote any more time than we did, in reality, to specific discussions of FM/TV--or MW, or LW, or utes, etc., etc. The paragraph in question acknowledged the fact that DXing is generally ignored by the public--for this very reason, an emphasis on SW was used as a sort of "hook" for targeting said public. Just about any guy on the street will equate SW with his concept of what we know as DXing; a concentrated discussion of any one particular non-SW band would be too technically complex for most listeners--thus, the public learns nothing. Even with this in mind, I invited Bruce to participate with the purpose of drawing attention to DX pursuits in the VHF/UHF spectrum--your statements calling the show an "all-SW" affair are a slap in the face to both Bruce and to me.

We did relay some important info about FM DXing. Bruce even got briefly into his running SCA controversy, and, given the brief amount of time we had for the entire thing, I think we did a pretty good job of covering all aspects of DXing. True, we devoted a lot of time to SW--but to say that the show was "all SW" is just not true. The VUD reads, "but guys, if you would have given us a chance..."--why didn't we hear from any of the WTFDA Staff as callers?? Where were you that night?? Any of you would have had a golden opportunity to call in an deluge the program with plugs for the club--many others did just that for their respective organizations.

Personally, I have been a DXer since I can remember--and, having grown up in Georgia, I'm well aware of the DX available on the VHF/UHF bands. The "propagation modes more rare and different..." as stated in the January VUD blurb, were in fact covered by Bruce during his initial conversation with Ray.

In closing: I would have no argument with any assessment of the show, which theoretically would have stated that the show was weighted toward SW--indeed, that's the way it was designed--but not at the exclusion of other modes of DX. But to say that the show was "all shortwave" is terribly unfair--and, again, downright false. Strictly as a member, I think the club staff owes it to the membership to set the record straight.

--Greg Hardison
ABC Talkradio

TECHNICAL TOPIX: all about s-meters

It probably isn't too hard to figure out that S-meters indicate the strength of a signal presented to a tuner or receiver. But do they really give the user information that can improve local or DX reception? And what can a radio experimenter do with the cute little LED displays that change color with signal strength? Ideally, an S-meter installed in a tuner would be calibrated directly in units of signal amplitude (microvolts or dBf), but instead usually have some arbitrary scale 0 to 5, 0 to 10, or no scale at all. Who knows whether or not a scale reads linearly? In some portable radios, "s-meters" are labeled as "tuning indicators," and I've only seen one TV in my life with a S-meter. This article proposes, then to answer these pressing questions of our time, describe how s-meters and tuning indicators work, and even how to connect these devices into your tuner or radio.

In these days of advancing technology, more and more receiving equipment is embellished with LED bargraphs and color patches instead of "old-fashioned" meters, which may be a step backward from the DX'ers standpoint. As an observation, I looked at literature for 35 stereo tuners and receivers at random (all 1982-1985 models; no particular price range) and found the following kinds of indicators:

+ DIGITAL READOUT OF SIGNAL IN ACTUAL dBf (Sansui)	1
+ CALIBRATED S-METER (Tandburg, ReVox)	3
+ 5-SEGMENT LED BARGRAPH	16
+ 3-SEGMENT LED BARGRAPH	3
+ PATCH that CHANGES COLOR with signal level	6
+ NO DISPLAY AT ALL! (Pioneer, SAE, Akai, NAD)	4
+ ONE LED (Denon)	2

From this one sees the influence of marketing departments! No doubt the LED graphs are the most prominent because (1) they are inexpensive (cheap), and (2) LED's have a certain "hi-tech" look that sells what may be otherwise undistinguished equipment.

Needless to say a 3 or 5 LED display, or a silly patch that changes colors, or even the 0.5 x 0.75 inch edge meters in some portables simply do not have enough resolution for any scientific observation. We must remember that there's no reason--from the manufacturer's point of view--to provide stuff that the majority of consumers don't care about. The DX'er, however, who wants to experiment with antennas, preamps, traps, and other RF tomfoolery must have some sort of meter with which to gage the results of said experiments. Fortunately, we can make about any receiver "talk."

First off, let's pick up some radio operation so that the reader can see exactly what goes on in a tuner. It may not be obvious from a schematic of a TV or tuner where to hook up an S-meter, but an understanding of how the circuits work can make it so. There really is no mystery to things like AVC, AGC, AFC, and FCC (scratch that last one.), which are all involved in signals and tuning.

Even though we are VHF listeners, it is helpful to look at AM radio for a bit. Mathematically, commercial broadcasters use a method of AM which forms a signal given by

$$f_{AM}(t) = f(t) \cos \omega_c t + A \cos \omega_c t.$$

This represents amplitude modulation, where $f(t)$ is the music or sound to be transmitted, and ω_c is the carrier frequency (i.e. for WABC, ω_c is $2\pi \times 770$ kHz). A is a constant term, the carrier amplitude, which is adjusted at the station along with per cent modulation to yield undistorted audio. To us the math is not important, but the math represents a handy means of wireless transmission for which cheap receivers can be built. As you well know, $f(t)$, the program, can be recovered from the AM signal with one diode!

The AM radio detector of Fig. 1 is no doubt familiar to all, but there is a bonus. When $f_{AM}(t)$ is demodulated with a circuit like Fig. 1, one actually recovers $f(t) + A$, or, in other words, the music riding on a d.c. level. That d.c. level depends upon the strength of the signal applied to the input from the antenna. Thus, if we ignored the music, we would have a device that indicates relative signal level.

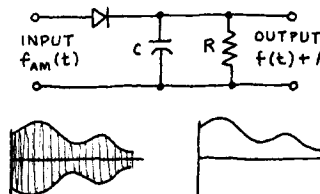


FIG. 1 AM DETECTOR

With that in mind, let's look at FM. For your information, frequency modulation may be described by an equation similar to that for AM:

$$f_{FM}(t) = A \cos[\omega_c t + k \int f(\tau) d\tau]$$

where the symbols are the same as before, k is a modulation constant, and $f(\tau)$ is the program. To retrieve $f(\tau)$ from the FM signal tickling our antenna, two kinds of detectors are commonly used. One, the discriminator detector (or "Discriminator" for short) consists of a differentiator to remove the integral, followed by the simple AM envelope detector of Fig. 1. The discriminator requires a "Limiter" circuit ahead of it. The limiter reduces the effect of variations in the amplitude of the IF signal, which would be detected themselves and passed on to the audio.

More commonly, the Ratio Detector is used to demodulate the FM signal. The circuits of several ratio detectors appear in Fig. 3. In Figure 2, a simple R-L discriminator is illustrated for comparison. In Fig. 3(c) actual parts values listed are for a Radio Shack TM-102 AM/FM stereo tuner. A block diagram of a complete FM receiver appears in Fig. 4 which can be referred to to help locate these circuits in your tuner.

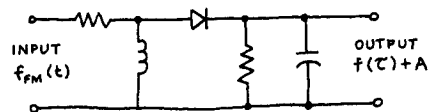


FIG. 2
Simple discriminator

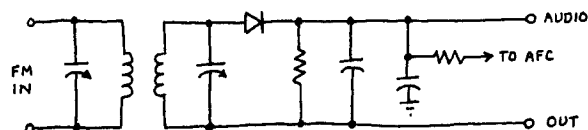


FIG. 3a
Single-Tuned discriminator

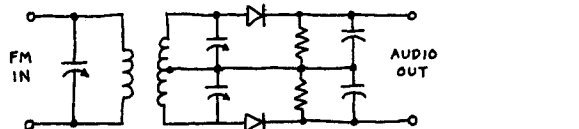


FIG. 3b
Triple-Tuned (Foster-Seeley) discriminator

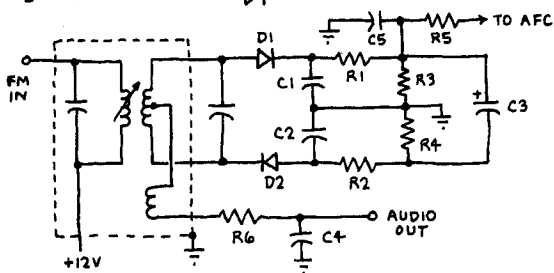


FIG. 3c
Practical Ratio detector
R1 = R2 = 1000 Ω
R3 = R4 = 10K
R6 = 100 Ω
C1 = C2 = 100 pF
C3 = 3.3 μ F
C4 = 220 pF

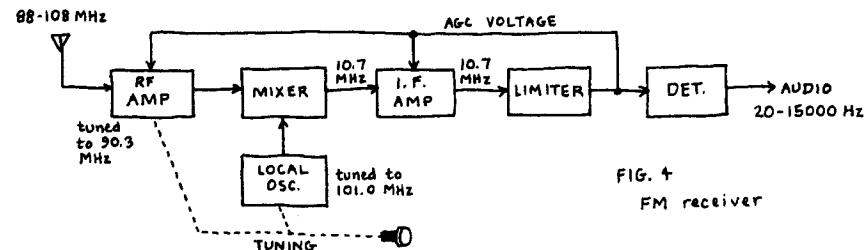
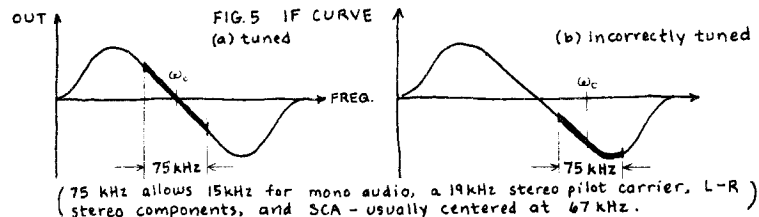


FIG. 4
FM receiver

Any information modulated by means of FM will cause the carrier frequency to vary. For example, a 1000 Hz audio tone broadcast over 90.3 MHz FM will vary the carrier from 90,301,000 to 90,299,000 Hz. In Fig. 3(c), then, the currents through diodes D1 and D2 vary when the IF frequency varies from its center at 10.7 MHz. Since those currents are unequal, a voltage develops across C4 which represents $f(\tau)$, the program. The voltage across C4 need only be amplified or fed into headphones. The d.c. voltage at C5 can be used for Automatic Frequency Control (AFC), which will be described later.

Now, the reader has been exposed to the detector, upon which the rest of our discussion is based. From the discriminator circuit, one can derive voltages for tuning meters, signal meters, AFC, and AGC. The circuits in Fig. 3 are relatively easy to build, reliable, and in widespread use in almost every FM receiver. If you have read this far, then we are ready to proceed to practical matters.

Casually speaking, one tunes an AM receiver for the loudest volume, to correctly tune in an AM station. An FM tuner, on the other hand, is tuned to deliver the least distortion. This is illustrated in Fig. 5, a diagram of the response of the detector.



In Fig. 5(a), the radio is tuned exactly at the center of the S-curve. If the maximum carrier frequency deviation of the FM signal is 75kHz (as is the case in the 88-108 MHz broadcast band), the carrier falls within the linear region of the curve. This implies that as the carrier voltage changes with the music, the output voltage of the detector changes linearly with it.

In Fig. 5(b), notice how the improperly tuned radio allows the carrier to deviate into the non-linear part of the detector's response. Audible distortion results because the changing carrier frequency does not cause a corresponding change in output.

So...the operation of the FM detector requires exact tuning for best audio reproduction, stereo separation, etc. To assist the operator in this quest, some manufacturers have included center-tune meters in their products. Not to be confused with S-meters, the tuning meter has a positive, zero, and negative region on its scale, and the receiver is tuned so that the needle rests at the zero, or center.

It is a simple matter to pick off a d.c. voltage at the detector and use it to drive a center-tune meter. In Fig. 3, R5 and C5 make this d.c. voltage (C5 shunts the a.c. component to ground) available to operate a tuning meter, AFC, or both. When the receiver is correctly tuned, the d.c. across C5 is zero. If the frequency is too high, there is a positive d.c. level. If low, there is a negative d.c. level. Used for AFC, this voltage is used to slightly re-tune the local oscillator in the direction that yields zero d.c. offset. Thus, the AFC voltage corrects slight mistuning, and may even tend to "pull" the receiver to a stronger station.

Sometimes AFC switches are provided which enable the user to disengage the AFC. When DX'ing a weaker station next to a strong, local station, it is to your advantage to disengage the AFC so that the tuner will stay on the weaker channel. Modern FM receivers seldom have these switches because today's local oscillators do not tend to drift as much as did the tube designs. AFC or PLL action is still desirable and used, but in very few cases will it disturb the selectivity of a receiver.

From an experimenter's standpoint, a high-impedance VTVM or digital VM may be used to probe the AFC voltage without upsetting the operation of the tuner. If there is an AFC switch, simply probe there. Otherwise, look for an electrolytic capacitor in the detector circuit and probe around there, with the (-) lead connected to some common or ground point in the tuner. You should see a d.c. voltage swing from a negative value, to zero (when the station sounds like it is tuned in), and up to a positive value as you tune across the station. A center-tune meter, or even a dual-color LED can be hooked up as a permanent feature of the radio. (More on that later.)

Our discussion on S-meters--meters which give some relative indication of how strongly a signal is coming into the tuner--will involve another important feature of radio receivers: Automatic Gain Control (AGC). AGC is used interchangeably with AVC. Automatic Volume Control describes the effect of the AGC circuit.

Jumping back to the AM detector, we found that the d.c. level appearing at the output terminals varied with incoming signal strength. Imagine, now, listening to a broadcast whose signal is constantly fading in and out. On a radio without AVC, you would have to constantly adjust the volume control, an irritating inconvenience. Tuning across the dial without AGC would produce barely-audible sound from the weak stations and overload and distortion from the strong ones. The AGC system takes a signal-proportional voltage from either the IF or detector stage and uses it to vary the gain of the RF and IF amplifiers. It operates as a feedback system. Thus, the RF and IF stages operate at maximum gain as needed for the weaker stations, and AGC voltage reduces the gain on strong signals. The effect at the speaker is a relatively constant volume for all incoming signals.

AGC circuits are specified by measurable factors such as attack time, decay time, dynamic range, polarity, etc. The attack and decay times are selected to prevent a loud snap in the speaker when the AGC responds to a strong signal. Sometimes "AVC action" switches are provided on receivers where the nature of the signal to be received might require "faster" or "slower" action. As an example, a practical AVC-controlled RF amp stage appears in Fig. 7.

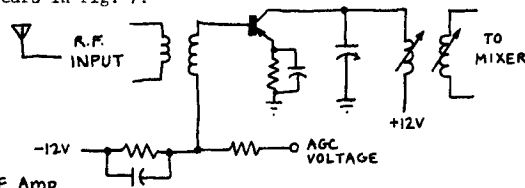


FIG. 7
AVC-controlled RF Amp

Notice that as RF signal from the antenna increases, the AGC voltage picked off from the limiter and applied to the AGC terminal increases. This adds to the -12V and decreases the transistor's bias voltage. This in turn causes the gain to decrease.

The AGC then is a convenient means of providing the best receiver performance under varying signal conditions. Now, we purpose to use that d.c. voltage for our own plans: S-meters. While the AGC voltage is NOT EQUAL to the signal entering the antenna terminals, it is PROPORTIONAL, which is all that matters since it is easy to build circuits to scale things. In some cases the AGC voltage will be inversely proportional, but still quite useful for our purposes.

Finding the AGC voltage in a tuner is the only thing that might require a little effort. Fortunately in television receivers one always has a place to start: the tuner. In any TV with a separate tuner (meaning one can see a physically distinct box containing the tuning components or switches, and with a shaft sticking out of it) there must be connections to that unit: antenna input, signal output (by coax cable), power, and AGC. (TV tuners normally have a television's first RF stage built-in for noise immunity and, hence, the need for an external AGC voltage.) Older TV's with mechanical tuners are especially easy to work with. In many cases the power (often labeled "B+") and AGC terminals are labeled.

To observe the AGC voltage requires a voltmeter with a very high input impedance. Most analog VOM's have a rather low (by today's standards) impedance which will load the AGC circuit excessively and upset its operation. Thus, a VTVM or digital VOM is recommended. With the negative lead connected to ground, you will measure at the AGC terminal a small (less than 5V) d.c. voltage which will change as you rotate the antenna or otherwise cause the signal at the antenna terminals to change. If the AGC terminal is not labeled, it can easily be found by the process of elimination. (And do be careful inside a live TV set, please!) Be aware the "B+" voltage on tube-style TV's and receivers may be a hundred volts or more.

If you can set your meter where it can be seen from the front of your TV, it makes an interesting experiment to see how the picture quality changes with signal level. Also, you may observe that if you rotate the antenna for best picture, you may have to rotate it slightly more for maximum signal reading without noticing any further change in picture quality.

There is no reason the meter thus connected cannot be left there permanently. If the voltage decreases with increasing signal, reverse the leads. If you choose to buy a small panel meter, you will need to whip up a small matching circuit to drive it, as it probably cannot be connected directly to the AGC terminal. This will be described in the next part of this article.

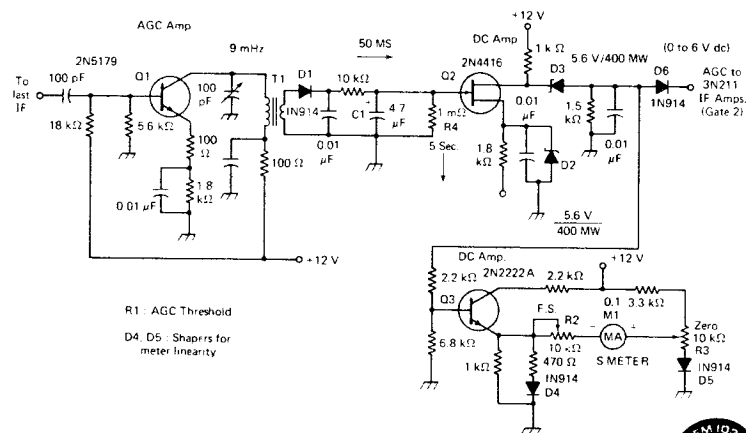
Radios may seem to conceal the AGC better, as all those little parts are soldered to one board and there are usually no labels telling where everything is. In this case the most logical way to go about this whole business is to carefully and thoughtfully probe around in the area of the discriminator and IF amp until the desired voltage is found. Match your radio's schematic to the detectors shown in Fig. 3. If you have no schematic, you can still look and find the circuits of Fig. 3 similarly reproduced in your radio. Start by locating the pair of diodes which make up the detector (don't confuse with the power supply diodes, which will not be physically located anywhere near the area you should be looking anyway). The transformers in Fig. 3 are encased in square, chromed metal cans with a screw-adjustment hole on top. Especially notice any test points or unconnected terminals in the area as they often provide exactly the voltage we are looking for. (Manufacturers sometimes will design in those points for testing and servicing, and may even use them to hook up a S-meter on a model more expensive than your own. Don't overlook this.) Your voltage may increase or decrease but whatever it does it must do so with changing signal at the antenna terminals. If you're looking for AFC voltage, it must change with tuning, but not with signal strength.

Suppose your tuner already has some sort of signal-indicating device which you want to improve. It, of course, makes your job that much easier, as you already have the connection located. Just trace the wires back from the LED or whatever to the board.

The next step in either case it to either (1) run wires out to a terminal strip or jack on the receiver's case, or (2) build in the meter. The former option allows you to connect your voltmeter at those times when you need to see an S-meter, and is probably less traumatic to the tuner. To connect a panel meter into the AGC or AFC circuit will require some sort of simple transistor circuit to drive the meter and protect the existing circuitry from being unbalanced by the low resistance of a meter. This will be described next time.

Next month this article will continue with information on designing the meter "interface" circuit, and what can be expected from the S-meter.

73's Tim McVey Route 3, Box 568, Bolivar, TN 38008



R1 - AGC Threshold
D4, D5 - Shapers for meter linearity

Figure 8. Complete AGC system for use with dual-gate MOSFET IF amplifiers. R1 is a threshold control that is set to provide the desired AGC initiation time respective to the incoming signal level. D4 and D5 are shaping diodes to aid S-meter linearity.



SOUTHERN FMDX

Eric Bueneman
c/o KCFV-89.5 FM
3400 Pershall Rd.
Ferguson, MO 63135

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

The chatter will wait until the end of the column.

PAT DYER (WA5IYX), 5315 Silvertip Dr., San Antonio, TX 78228

Equipment: Realistic TM-1001 tuner into Allied 426 with an Archer six-element beam and rotor at 20' AG (please note also NABL).

Pat wraps up 1985 with this awesome report, all times CST.

NOVEMBER 1985

5 Es	1713	XHFE	89.9	BCN	1010
	1716	XHBA	104.1	BCN	1010
	1719	XHMMP	92.3	BCN	1010
tr	1729	KNFM	92.3	TX	280
7 Es	1713	WFNE	89.3	WI	1190
		WERN	88.7	WI	1065
	1720	fade-outs			
	1853	WCAL	89.3	MN	1080
	1857	KQRS	92.5	MN	1110
	1858	KSTP	94.5	MN	1110
	1859	KBEM	88.5	MN	1110
	1902	KTIS	98.5	MN	1110
	1903	KTCZ	97.1	MN	1110
	1908	fade-outs			
	1958	KDDB	92.5	CA	1340
	2001	KUSD	89.7	SD	920
	2002	KELO	92.5	SD	975
	2004	KBHE	89.3	SD	1040
		KESD	88.3	SD	1020
	2006	KFAC	92.3	CA	1190
	2009	KLON	88.1	CA	1180
	2011	KLOS	95.5	CA	1190
		KMET	94.7	CA	1190
	2012	KMGG	105.9	CA	1190
		KJOI	98.7	CA	1190
	2015	KFOX	93.5	CA	1195
	2024	KPBS	89.5	CA	1120
	2033	KILA	90.5	NV	1050
		KCEP	88.1	NV	1050
	2120	KPCC	89.3	CA	1185
	2121	KZLA	93.9	CA	1190
	2138	fade-outs (spotty 2020-2138)			
8 Es	1930	KSPC	88.7	CA	1160
	1931	KPCC	89.3	CA	1185
	1937	KXLU	88.9	CA	1190
	1938	KFAC	92.3	CA	1190
	1939	KJOI	98.7	CA	1190
	1940	KHTZ	97.1	CA	1190
		KLOS	95.5	CA	1190
		KLON	88.1	CA	1180
		KUSC	91.5	CA	1190
	1941	KFOX	93.5	CA	1195
	1943	KMET	94.7	CA	1190
	1947	KNOB	97.9	CA	1180
	1949	KSBR	88.5	CA	1150
	1950	KCHV	93.7	CA	1070
	1951	KIFM	98.1	CA	1120
		KGB	101.5	CA	1120
		KFMB	100.7	CA	1120

(contd.)

8 Es	1952	KFSD	94.1	CA	1120
	1955	XSTRA	91.1	BCN	1100
	1957	KSDS	88.3	CA	1120
	1959	KFBS	89.5	CA	1120
	2003	XNRW	92.5	BCN	1100
	2007	fade-outs			
12 tr	2117	WCKW	92.3	LA	495
	2128	WRKF	89.3	LA	450
	2219	WGGZ	98.1	LA	450
	2234	KJEF	92.7	LA	360
	2249	ABIM	94.9	NM	440
		(see comment #1)			
	2252	ASMB	94.5	LA	395
	2253	KTDY	99.9	LA	395
	2334	KMTH	98.7	NM	385
	2335	KBAT	93.3	TX	280
	2336	KUFO	97.9	TX	275
	2338	KJIP	96.9	TX	275
13 tr	0146	WYNK	101.5	LA	450
	0208	WVNO	89.9	LA	510
	0728	WTYX	94.7	MS	525
	0729	WMAU	88.9	MS	470
16 tr	0045	KDNT	94.5	TX	300
28 tr	2351	KNFM	92.3	TX	280
29 tr	2020	KNFM	92.3	TX	280
	2043	KJIP	96.9	TX	275
	2106	KKKK	99.1	TX	275

DECEMBER 1985

12 ms	0844:48	WBKR	92.5	KY	865
tr	1030	KDNT	94.5	TX	300
ms	2044:20	WBKR	92.5	KY	865
13 ms	0645:50	KEZT	104.1	IA	880
	0647:57	KLSK	104.1	NM	600
	0703:15	KJJO	104.1	MN	1100
	0845:40	WESG	92.5	SC	1010
Es	1427	TG--	88.1	Guat.	1120
		TGRT	88.8	Guat.	1120
	1430-1447	lull soon to fade-out			
ms	2159	WKKX	104.1	IL	815
15 Es	2114	KSTP	94.5	MN	1110
20 Es	1123	WYSU	88.5	OH	1275
	1126	WKCC	96.5	WV	1090
	1127	WKBN	98.9	OH	1275
	1130	WTOF	98.1	OH	1235
	1131	WRJC	92.3	OH	1260
	1133	WSKS	96.5	OH	1045
		WHBC	94.1	OH	1235
	1137	WNCI	97.9	OH	1135

PAT DYER (Continued)

DECEMBER 1985 (Contd.)

20 Es	1138	WVUD	99.9	OH	1085
	1143	WNGO	101.3	OH	1200
	1144	WGCL	98.5	OH	1250
	1145	WDBN	94.9	OH	1230
		WDMT	107.9	OH	1250
	1148	WVNO	106.1	OH	1180
	1151	WSNY	94.7	OH	1130
	1154	WMJI	105.7	OH	1250
	1200	WPTW	95.7	OH	1085
	1203	WVCP	88.5	TN	845
	1207	WLAP	94.5	KY	995
20 Es	1209	WDCL	89.9	KY	960
	1211	WNUB	88.5	OH	1045
		WEKU	88.9	KY	995
		WKSU	89.7	OH	1255
		WJGC	95.1	KY	890
	1222	WKW	98.1	KY	995
	1235	fade-outs			
24 Es	1525	TGRT	88.8	Guat.	1120
	1528	TG--	88.1	Guat.	1120

- Comment #1: Antenna was pointed east when KBIM-94.9 was caught.
 Comment #2: "I got a few things with the quadratid meteor shower, but not enough time to review the tapes-so they'll be in the next report".
 Comment #3: "A lot of early November Es, but the big day so far (for MUF) this winter season has to have been December 20".
 Comment #4: "Geminid meteors very productive, as the in-state trop conditions were down, letting me sit on 92.5 without too much of Dallas (KAFM) and 104.1 without much of Houston (KXBE).
 Comment #5: "Good trop on November 12-13 seemed to last only about twelve hours. Don't often have it going well into New Mexico, Louisiana and Mississippi at the same time." 73, rat.

(That's what I call "writing" in a Texas drawl, hi!-eb)

ERIC BUENEMAN, c/o KCFV 89.5 FM, 3400 PERSHALL RD., FERGUSON, MO 63135

Not much in the way of DX this time, the usual Springfield/Decatur, IL, Cape Girardeau, MO and southern IL FMs. One day of note was January 16-17, 1986 when WIBI-91.1 and WSMI-106.1 were coming in with signals equivalent to those of St. Louis stations. Semi-local KTJJ was considerably weaker due to adjacent-channel WNNB. My Archer Deluxe indoor antenna was retired on December 21 after two and one-half years of service. In that time, I heard over 70 stations in 13 states and one Canadian province. Right now I'm on a cheap rabbit ears until I can afford a new antenna.

CHATTER:

DEADLINE DEPT.: Deadlines will always be the last day of each month.

KCWA NOW ON THE AIR: KCWA 89.9 MHz Arnold, MO is now on the air. Haven't heard them due to WLGA.

KCFV CHANGES PRODUCTION DIRECTORS: Jerry Prsha, a nighttime DJ at KCFV, has taken over as production and continuity director, succeeding Brian Crader, who resigned because of professional commitments at WLL-92.3 St. Louis. Of course, Jerry is on from 2100 to 2400 CST Mondays and Wednesdays.

REMINDER: If you hear KCFV via trop or Es, send the report to SFM and I'll have GM Ted Paas send you your QSL. Request line numbers are (314) 595-4472 or (314) 524-8311.

SOAPBOX DEPT.: This anti-AM campaign must stop. I am also an AM broadcast DXer, and I believe that AM CAN COMPETE WITH FM. AM Stereo, simulcasting and other technical advancements will save AM radio toward the end of the 1980s. FM will still be popular, but AM will heat up in the next four years. There's already a move to AM-FM simulcasting for several stations, especially Top 40s like WCZY Detroit and WNNK Cincinnati. Radio, it's red hot, but FM is hot and AM is getting much hotter.



QSL CORNER



THOMAS J. YINGLING, JR.
221 PINEWOOD ROAD, BALTIMORE, MD 21222-2345
PHONE # 301-2828-5649

FM QSL's

- FL WFLA 98.3 Tampa, 801 Jackson St., zip-33602. Reply with a blue & white card, signed by Brian Williston, Eng. Van Horn
- WBJW 105.1 Orlando, % P. O. Box 8105, Winter Haven, FL 32790. Letter, & bumper-sticker from Donanath, CE. Van Horn
- ON CFMX 103.1 Cobourg, % P. O. Box 1031, Port Hope, ON L2A 4B5. QSL-Card in 2 weeks from Martin Posenthal. Ross
- MS WBIP 99.3 Booneville, Box 232, zip-38829. Nice letter on f/up report from R. J. Bonds, Pres. & Mgr. Cooper
- PA WCAU 98.1 Philadelphia, City Ave. & Monument Rd., zip-19131. Nice letter on f/up report from Vincent P. A. Benedict, VP/GM enclosing a c/m & large photo of female dj I heard. Cooper
- CT WCNI 91.1 New London, % Box 1333, Connecticut College, zip-06320. Handwritten letter from Peter (somebody), PD. Cooper
- ME WBGW 97.1 Bangor, 35 Hildreth St., zip-04401. Brief letter on Ord try from George Hale, PD. Cooper
- PA WFLN 95.7 Philadelphia, 8200 Ridge Ave., zip-19128. Coverage-map & verie on biz card of Thomas D. Moyer, CE Cooper
- NJ WKXW 101.5 Trenton, Box 5698, zip-08638. Letter & promo packet from Terry Watts, VP of Derations, on f/up. Cooper
- PA WVIA 89.9 Scranton, % Public Broadcasting Center, Pittston, PA 18640. Letter, programming guide, coverage-map & other goodies from Thomas J. McHugh, Dir. of Programming-Cooper
- NJ WNBR 100.7 Wildwood, 3010 NJ Ave, zip-08260. Coverage-map & ball-point pen received, BUT NO LETTER! Cooper
- NJ WSOU 89.5 South Orange, Seton Hall University, 400 s. Orange Ave, zip-07079. Friendly 2-page letter from Michael A. Collazo, GM who says that I hold therecord for furthest report received by WSOU! Cooper
- IA KXJX 103.3 Pella, Box 45, zip-50219. Letter from Mark Anthony McVey (any relation to Tim?) Elving
- MN KKBJ 103.7 Bemidji, Box 1070, zip-56601. Letter from Curt Peterson saying I hold record for the greatest reception distance & invited me to drop in for a tour. Elving
- KLCZ 96.1 Crockston, Box 665, zip-56716. Verie came in envelope for KDEZ. However station never operated as KDEZ, & signed by David Walter. Elving
- K205AX 89.1 Hibbing-Chisholm. % KDNW, Duluth, MN 55802. Letter from Paul Harkness, Managr at parent station. Elving
- KDOM 94.3 Window, Box 218, zip-56101. Letter from Rich Biever, GM says"they has numerous reports from MT & WY for KDOM-AM, but I believe your report on KDOM-FM is the most unique" Elving
- SD KKSD 101.5 Gregory, Box 101, zip-57533. Doug Williamson, sent letter & keychain. "Adolph farthest reporting point or reception." Elving
- KQRN 107.3 Mitchell, Box 921, zip-57301. Joseph R. Shields, Pres. & GM who mentioned heard in AZ once. Elving
- KDSD 90.9 Pierpont-Aberdeen % KUSD-FM, Vermillion, SD 57069. Letter from Gregory W. Schnirring, Radio Manager, "To my knowledge, your reception is by far the most distant point from which reception of KDSD has been reported" Elving

Reporters this all FM-QSL's month are Larry Van Horn of Orange Park, FL; Robert S. Ross of London, ONT; Ernest R. Cooper, of Provincetown, MA & Bruce F. Elvings now of Esko, MN. Not a bad month for reports with one FM translator reported. In reporting stations for column please give the information the same way I type up this column. This would make my typing easier & faster, also give the station channel or frequency so I don't have to look them up like I had to this month. Thanks alot, and just keep on reporting.

73's Tom

COME TO THE 1986 W.T.F.D.A. CONVENTION JAMESTOWN, NEW YORK AUGUST 1, 2, 3



Don't Miss It!

YOU ARE INVITED TO THE CLUB'S 1986 SUMMER MEETING!!! JOIN YOUR FELLOW WTFDA TV, FM, & PSB DX ENTHUSIASTS THIS SUMMER FOR A WEEKEND GATHERING IN THE SCENIC HILLS OF WESTERN NEW YORK STATE. MANY OF THOSE WHO ATTENDED THE 1984 CLUB CONVENTION AT THIS LOCATION RATE THIS AS THE BEST CLUB CONVENTION SITE EVER!!!

YOUR 1986 CONVENTION HOST IS MICHAEL LAPINSKI, WHO CAREFULLY PICKED THIS 41-ACRE PROPERTY AS A GREAT DXING LOCATION. YOU'LL SEE WHY...TV AND FM DX SYSTEMS WILL BE IN OPERATION DURING THE CONVENTION ACTIVITIES. 300 TO 400 MILE TROPOSCATTER ON FM AND TV IS COMMON THERE DURING "NORMAL" CONDITIONS AT THIS TIME OF THE YEAR!!!

BE WATCHING THE QUD FOR COMPLETE DETAILS OF THE BUSY PROGRAM BEING PLANNED. THERE WILL BE THE USUAL DX/GAB SESSIONS, PLUS TENTATIVE TOURS OF AREA BROADCASTING FACILITIES.

IT'S ALMOST SPRING...TIME TO START MAKING SUMMER TRAVEL PLANS. WE'RE HOPING TO MEET YOU AT THE 1986 WTFDA CONVENTION!!!

NORTHERN FM-DX

Saul Chernas
P.O. Box 292
Paris, Ontario
N3L 3J2

NORTHERN FM-DX March 1986

MARCH 1986 (519)442-4456 (work) or (519)756-1201 (home) ANYTIME

ILLINOIS REPORTS HERE! So does AK CT ID IN IA KS ME MA MI MN MO MT NH NJ NY ND OH OR PA RI SD UT VT WA WI WY CANADA, eh! and non-USA entities such as Qatar. ARKANSAS DOES NOT REPORT TO THIS COLUMN!

BANDSCANS begin to trickle in. Remember the rules: report what you hear in a given six hours. FM ATLAS-sized entries will result in one editor found dangling by his necktie from a yagi. Please type if possible, so that I can use as-is. Or write neatly. This past winter has been dead re DX, at least as of Jan 31. Some TV Es, minimal Tropo. KEN ONYSCHUK...I sent your info to FM NEWS' BRUCE ELVING, so check his column for your contrib. Glad to hear from you!

SCOTT HOOD - Dean Jr. College - Box 971 - Franklin PA 02038-1994 EST

SEPT 1985 FROM FRANKLIN MA

26 Tr
0310 WQHQ 104.7 MD Ocean City "2-Q-105" 330
NOV 1985
1 Tr
0050 WUSL 98.9 PA Philadelphia 250
7 Tr
1805 WUSL 98.9 PA Philadelphia 250
14 Tr
0820,1205 CT in elevated strength, NYC in weak
1205 WUSL 98.9 too weak to ID (Scott, I'll bet you get 'em more often than people in downtown Philly!-saul)
18 Tr
1950 WUSL 98.9 PA Philadelphia 250
19 Tr
0820 CT in Stereo, WALK \$, NYC weak-semi
0825 WUSL 98.9 PA (HELP-saul)
2215 NYC in & out weak, warm nite with patchy to dense fog expected, but so far neither fog nor serious DX; same at 2340 check
21 Tr
0830 WUSL 98.9 PA Philadelphiaaaaah! 250

COMMENTS: Yup, the airwaves have definitely gone into hibernation for the winter! One thing I find unusual...when WERI 103.7

is off, WKNE-NH always there, tho WERI very close. (Though when I lived in Rindge, 25 mi. S.E. of Keene, I could always get ERI in \$). WJGM caught me off-guard, though I could only confirm it with the 5-band. That radio only comes in handy at "dead times" as the overload (or whatever) makes it very hard to distinguish real DX from overload. Another problem is the AFC. I can barely get within 2-3 channels of a local. When cx not dead, the "boombox" is by far the best. Hopefully I'll move up into the McKintosh/Carver league! Well, packing my bags and going to HAWAII (HA-abbrev) for Xmas. See what I can get there, Es could be interesting. (Lots of ocean to pick up!-saul;if you get WUSL there let us know, hi! In the meantime, I suspect it is not unusual at least in Franklin. You could probably get it any night if you waited for a fade-in-saul) (Also, report HA dx here-s,again)

NOTES RE DX QTHs:

- (1) FRANKLIN approx. 43 mi. SSW of Beverly.
- (2) All new loggings NEW if logged 1st time in either location.
- (3) Franklin logs not considered NEW if previously logged in Beverly; BUT Beverly logs ARE considered NEW if already logged in Franklin; though stats kept are separate.
- (4) all distances measured via local, regional, or national roadmaps.
- (5) Unless otherwise noted, distances are measured from location logged to city of license.
- (6) Mileages rounded: -within New England (incl. E'tern NY for Franklin), to nearest mile.
-New England-420 miles...nearest 5 miles.
-420-700 mi. ... 10 miles. } (Ed: see note to left)
-700 plus... 25 miles.

(Scott, for your own use, the mileages are okay, but do not use these standards for the

STATS column or club records-saul) (How do others do this-sc?)

NOV 22 Tr Pre-Kate-astrophic (non-dx hurricane)
0005 98.9 WUSL PA Philly 250
0105 WAZJ 99.1 NJ Zarephath 195
0115 WCAU 98.1 PA Philadelphia 250
27 Tr FROM BEVERLY MA Inclement wx
1935 WALK 97.5 NY Patchogue 170
airwaves from Augusta ME to CT unstable.
Remember this is the place where NYC is considered real dx.
30 Tr
1330 CT in & out all afternoon & night
DEC 1985
1 Tr pre-storm
0950 CT as above
1355 WJZR 98.1 VT Rutland 129
1400 WRUT 97.1 VT Rutland 129
BACK IN FRANKLIN, SAME DAY
1610 CT about normal, NYC in & out, Rutland pr
1635 WUSL 98.9 PA Philadelphia 250
4 Tr
0905 CT elevated reception
2005 WJGM 103.7 NJ Atlantic City (WERI off, under WKNE) 250
9 Tr (WCRB off; with "5-Band radio"
0120 WUUU 102.5 NY Rome ac (r-saul)"U-102" 220
13 Tr 0950 CT elevated strength.

ERIC FADER 23-35 Bell Blvd. - Bayside NY 11360

Here's the latest "pirate report", in lieu of a DX report since I haven't had any DX... (Eric, thanks for the tape. I'm omitting some details for several reasons. Pirates really aren't DX, though they can be and DXers should be aware of them. For that reason I'm preparing a guide A-la-FM Atlas, to help DXers find them during Es, Tr... but details will be left out in this column about pirates. Only the basic loggings will get in; anything else cannot be - such as specific location, operator identity or speculation of such. The FCC reads DX bulletins looking for info, that has been proven. As a listener myself, I enjoy tuning in and speculating in private who & where they really are. I don't want myself or this club/column becoming part of an FCC investigation. Eric, I'm sending you a more detailed package on pirates, let me know if you don't (or do) get it. Here are Eric's pirate logs:

WFUN: 91.9 NY New York City area Dec 7-85 0130-0230.

WHOT: 91.5 not on lately.

NINE-FM: 91.9 NYC area heard 1985: Dec 28; 1986: Jan 5 0215-0245, Jan 6 2235 to past 0100 7th, Jan 8 2155 - past 2300, Jan 14 2300. On Jan 8, "Joe" from WFPF pirate called to say he runs 15 watts at 55'AGL. I've never heard WFPF but think they're 91.9 too.

Others supposedly on in area: WAXY, WBKE, and an unnamed one run by guy named Tony. Anyone interested in writing to Edwin Armstrong of Stereo Nine FM can write to: P.O. Box 73, Staten Island NY 10301-0073. (As far as I know, not his real name and he uses it on air-sc).

DAVE NIEMAN - AKRON NY - 14001-9529 Carver TX-11 tuner w/ \$-Probe-9 at 251/815'ASL.

NOV 1985

5 Es
1759 KESD 88.3 SD Brookings \$ 885
13 CW
0950 WGCC 90.7 NY Batavia r\$ (newto air)18
19 Tr
0045 WRSU 88.7 NJ New Brunswick r\$ 275
(WBFC off, CJOM-ON, WUUC-OH, CBOF-PQ all in)

COMMENTS: There has been quite a lot of E-skip on TV channels 2 & 3 lately.

Nothing on FM since Nov. 5. After reading the comments in the VUD re the 1985 Es season, I see the rest of you didn't

think it was a good one. Well here's a brief run-down on what happened in Western NY. The season started FEB 5 w/ Es to FL...no new loggings. It ended NOV 5. 22 openings and 44 new loggings. JULY 8 the best day - the skip began 1209 EST and ended at 2030 with a 2 hour break in between. 12 new loggings and at least double that in relogs. 1985 may not have been the best Es year ever but it made the top five here, dave.

LEE ANTHONY - ERIE... did you get my reply to your letter? If not write back. I hope I was able to provide satisfactory answers to your questions. If not, try the technical column-s.

That's it, lots of inclement wx and minor Tr to 250 miles using the car radio, but nothing worth noting. Remember, May is skip-time. Is your equipment ready? 73s- Saul.

Worldwide TV-FM DX Association

from February 9 Buffalo News

STORM DISRUPTS MAGNETIC FIELD, COMMUNICATIONS

BOULDER, Colo. (AP) — One of the strongest geomagnetic storms since 1976 disrupted communications across much of the northern United States on Saturday, the National Oceanic and Atmospheric Administration said.

The disruption of the Earth's normal magnetic field meant problems for satellites, radios and aircraft, but also meant a "northern lights" display much farther south than usual, a spokesman at the administration's Space Environment Services Center said.

The spokesman, Bill Brennan, said this week's storms — the worst of which started at mid-afternoon Saturday and was expected to last 24 hours — were linked to a series of powerful solar flares this week.

While such a phenomenon can also mean difficulties with power distribution and phone lines, engineers monitoring such systems can make adjustments to deal with the problems, Brennan said.

The aurora borealis from Saturday's storm was expected to be overhead in the latitude that encompasses both New York and Chicago.

In fact, the storm's intensity meant that "if the skies are clear, you will be able to see an aurora from almost anywhere in the United States," Brennan said.

C.C.I. [UNIDENTIFIED DX]

Robert Grant, K08EN
5775 Bishop
Detroit, MI 48224.
March, 1986.

CCI- unidentified DX.

March, 1986.

FM UNIDS:
Scott M. Hood, Dean Jr. College, Franklin, MA 02038-1994.
1984: Sun 4 Nov Tr 100.1 1910 EST-- FF (PTA: E'n Canada.) (there are several, I think
CBP8 in Trois Rivieres, PQ is most likely because of power-)

From Beverly, MA.:
1985: Fri 7 Jun Es 102.7 1245 EDT-- religion. (PTA: MN,WI,MI,TN,KS.) (weird PTA set, eh? -RG)
" " " " 98.1 1305 EDT-- "Paul Harvey Nx & Comment" (same PTA.)
" " " " 93.3 1415 EDT-- "Hot country hits in real stereo" (PTA: Midwest, SE'n US)
Fri 14 Jun Es 97.1 1335 EDT-- "We're Jammin'" said in "Jive"-type voice (PTA: AR,MO.)
(sounds like urban contempt to me, I have 2 U/C stations on that frequency listed,
WHRK, Memphis, TN and WQM, Greensboro, NC. -RG)
Fri 14 Jun Es 101.1 1340 EDT-- ad-"Tall Rymer's(?)" (PTA: AR,MO.)
" " " " 95.1 1415 EDT-- ra (A/C) format: "The music's here on K-95, It's 1:17"
(Thus CDT, PTA: AR,MO. Suspect KAMS.)
" " " " 98.7 1435 EDT-- r, "Rock-99" "...Springdale" (PTA: AR,MO. Susp. KWTO.)
" " " " 94.7 1440 EDT-- "...in Rodgersville.....down in Springfield.."
older announcer talking about plays that were going to be aired on the station.
(PTA: MO,AR. quite sure KITS.)
Sun 23 Jun Es 94.9 1140 EDT-- Farm or local Nx: "...hvy T-storms....Iowa..". (PTA: IA.)
Mon 1 Jul Es 96.5 1140 EDT-- "2-96 Hit Radio" (PTA: IL,MO,KS susp. WAZY.) (me too -RG)
" " " " 95.1 1145 EDT-- k, "...on the Q" (PTA: " " " " W2QZ.)
Tue 2 Jul Es 95.1 1135 EDT-- "Georgia Radio News" (PTA: GA.) (I list no 95.1 in GA. -RG)
Mon 8 Jul Es 97.3 0945 EDT-- "The new 97-Rock in the Tri-Land area" (PTA: GA. susp WJAD.)
" " " " 102.9 1030 EDT-- r, "Hit Radio" (PTA: S,SE.)
" " " " 102.9 1030 EDT-- k, (PTA: S,SE. Any others besides WMSI?) (Scott, when
you say "PTA SE." do you mean to say you think the signal originated southeast of
your location or in the southeastern part of the U.S.? In this column a simple direction
only is taken to mean direction of signal (usually antenna direction.) -RG)

TV UNIDS:
Scott M. Hood, Dean Jr. College, Franklin, MA 02038-1994. (From Beverly, MA.):
1985: Thu 23 May Es ch 2 2350 EDT-- "The Jeffersons" (PTA: OK.)
Fri 24 May Es ch 2 1530 EDT-- sounded like "WNSW", + offset.
Tue 11 Jun Es ch 3 0930 EDT-- "TV worth watching, WPRI(?) suspect WEDU.
(Definitely PBS. WPRI is commercial ch 12 in Providence. -RG)
Thu 13 Jun Es ch 3 1140 EDT-- "The Young and The Restless" (CBS) 1 hour EARLY!! (PTA: SE)
Sun 23 Jun Es ch 4 1005 EDT-- CBS, calls sounded like "WNBI" (PTA: IN,MO.) (W0BI-MS? -RG)
Tue 9 Jul Es ch 3 0915 EDT-- "The Love Boat"
Sat 13 Jul Es ch 3 1050 EDT-- auction or pledge drive, phone # 333-8696. (PTA: GA,SC.)
(write WEDU. -RG)
Wed 17 Jul Es ch 3 1505 EDT-- "Bugs (Bunny) And Friends"
" " " " ch 2 1515 EDT-- PBS, Computer/Medical pgm, + offset.
Mon 29 Jul Es ch 3 1945 EDT-- "Taxi" (PTA: Midwest.)
" " " " ch 3 1945 EDT-- "Wheel of Fortune" (PTA: " " " ").
Tue 30 Jul Es ch 3 1145 EDT-- Ballet, Opera or Dance pgm. PBS?
Thu 1 Aug Es ch 2 1900 EDT-- "Wheel of Fortune" (+ offset, PTA: SE.)
" " " " ch 3 1905 EDT-- "Wheel of Fortune" wx advisory for Carolina coast.
(PTA: NC,SC,GA. suspect WWAI.)
" " " " ch 3 1935 EDT-- "MacNeil/Lehrer Newshour" (PBS) (PTA: SE. suspect WEDU.)
" " " " ch 3 1055 EDT-- "Powerhouse" (PBS) suspect WEDU.
Mon 5 Aug Es ch 3 1340 EDT-- ABC, ad for something in Springdale.
Tue 6 Aug Es ch 2 2020 EDT-- PBS, "TV" logo., + offset. (Definitely WMAB, Ackerman,
Miss. -RG)

Michael Parks, Route 1, Box 103, Amery, WI 54001.
1985: Mon 24 Jun Es ch 6 1501 CDT-- "Dallas"
" " " " ch 3 1504 CDT-- "Muppet Show" ad- "Carpetmart" ph# 884-9246. logo
with red 3 in white circle (see drawing 1).
" " " " ch 3 1531 CDT-- "Diff'rent Strokes"
" " " " ch 3 1531 CDT-- "Tom and Jerry"
" " " " ch 2 1535 CDT-- "Smurfs"
Fri 28 Jun Es ch 3 1036 CDT-- "Dukes of Hazzard" (PTA: TX.)
Tue 2 Jul Es ch 2 1033 CDT-- "Match Game" (PTA: S, SE.)
" " " " ch 2 1155 CDT-- "Reading Rainbow" (PTA: S,SE.)
" " " " ch 2 1512 CDT-- "Little House On the Praire" (PTA: S,SE.)

Michael Parks, cont.
1985: Tue 2 Jul Es ch 2 1520 CDT-- "People's Court" then "Alice" at 1530. (PTA: S,SE.)
" " " " ch 3 1529 CDT-- "The Incredible Hulk" (PTA: S,SE.)
" " " " ch 6 1535 CDT-- "Love Connection" (PTA. " ")
" " " " ch 6 1535 CDT-- "Divorce Court" (susp. either this or above was WDSU.)
" " " " ch 2 1603 CDT-- "M*A*S*H" (PTA: S,SE.)
Mon 8 Jul Es ch 2 2234 CDT-- ad mentioned cities of Layton, Riverdale, and Logan.
(Layton and Logan are both in the Salt Lake City area- KUTV-RG)
Sun 28 Jul Tr ch 6 0015 CDT-- "Solid Gold" (PTA: NE,KS,OK. not W0MT.)
Thu 1 Aug Es ch 2 0142 CDT-- "Hawaii Five-0" (PTA: Canada.)
Sun 11 Aug Tr ch 6 2230 CDT-- "At the Movies" (PTA: S)
Sun 20 Oct MS ch 2 0327 CDT-- "CNN Headline News"
" " " " ch 4 0327 CDT-- "CNN Headline News"

Robert J. Williams, 312 Shoshone St. E., Apt. B-8, Twin Falls, ID 83301.
1985: Sun 19 May Es ch 3 2206 MDT-- "Star Trek" (PTA: Central US.)
Sat 25 May Es ch 3 2000 MDT-- "TURN TO 3" logo. (PTA: KS,NE,MO,IA.) (see drawing 2)
" " " " ch 3 2137 MDT-- movie- "The Longest Day" (PTA: Central US. not KYTV, KJLO.)
" " " " ch 2 2147 MDT-- "Solid Gold" (PTA: Central US.)
Sat 1 Jun Es ch 2 1948 MDT-- Tornado watch (or warning) symbol supered in upper left.
(PTA: TX.)
Fri 14 Jun Es ch 3 1200 MDT-- begin movie "Powder River" (PTA: TX,LA,NM,AZ,KS,OK,NE,SD,CO.)
" " " " ch 2 1530 MDT-- ads- "A-1 Mobile Homes", "Rogers Volkswagen" (PTA " " " " ")
Thu 20 Jun Es ch 2 1200 MDT-- end- "Guess What" (PTA: Canada, suspect CKTV.)
(the program name seems familiar, but I think it is CBC. -RG)
Sun 23 Jun Es ch 3 2117 MDT-- news with Karen Mayry. (PTA: Central US.)
Mon 24 Jun Es ch 2 1431 MDT-- begin "Welcome Back Kotter" (PTA: SW. KVBC-3 (NW) in.)
Tue 2 Jul Es ch 5 1152 MDT-- "Muppet-type" puppets in western clothing, followed at 1153
by a cartoon with Royal Canadian Mounted Police. (Dudley DoRight?? -RG)
(PTA: Canada, suspect CKK, CKOS, CJFB or CKBI. CBWYT-2 seen at 1130.)
" " " " ch 2 1202 MDT-- begin "Flintstones" (PTA: Canada, suspect CKTV.)
" " " " ch 2 2118 MDT-- CDT-zone station with a US map and "10PM Super Radar"
supered at bottom of screen. (KLNE-3 seen at 1952.)
" " " " ch 3 2131 MDT-- begin "Magnum, P.I." (same PTA.)
Mon 8 Jul Es ch 2 1840 MDT-- mention "Reliance" and "College of Business" (PTA: AB,SK,MB,
ND,WY,MT.) (There is a Reliance in SD. but not near any ch2-RG)
" " " " ch 2 1840 MDT-- "Entertainment Tonight". (same PTA) (Bob, when you said that
"Entertainment Tonight" is on ABC in USA you were wrong. "E.T." is a syndicated program,
it is carried by any station that buys it, including some ABC affiliates and others. -RG)
Mon 8 Jul Es ch 2 1909 MDT-- "The Cosby Show" (PTA: AB,SK.)
" " " " ch 4 1915 MDT-- "The A Team" (PTA: " " " " CFRN-3, CFQC1-3 also in.)
" " " " ch 3 2100 MDT-- logo (see drawing 3) (PTA: E. KAAL-6 came in at 2124.)
Tue 9 Jul Es ch 2 1405 MDT-- begin "Nanny and the Professor" (WSIL-3 in at 1300, KTBS,1430)
Sat 20 Jul Es ch 2 0950 MDT-- full CBP, no ID nor any other info. (KITV-3, KOET-3 in.)
Tue 2 Jul Es ch 3 1115 MDT-- "Sesame Street" (PTA: ND,MB,SK. CBWFT also in.)
Sun 4 Aug Es ch 2 1930 MDT-- ad- "Royal Le Page" with phone #s: 555-2368 and 268-????.
(PTA: MB,SK. KGF6-2 also in.) (sounds French to me, probably CBWFT7, Kenora, ON. -RG)
(by the way, phone numbers beginning in "555" yield directory assistance and are frequently
used in TV shows and movies as fictional phone numbers.)

TV UNIDS:
Bill Nolman: (11/85 CCI.)
1985: Tue 2 Jul Es ch 2 2052 EDT-- Documentary about India. (KUSD, SD. The show was "Nova"
- Michael Parks.)
Mon 15 Jul Es ch 2 1750 EDT-- SS, ID as "CTV", ad- "Alka-Seltzer". (John Combs points
out that there is another ch 2 in D.R., in Santo Domingo, HIJB. with more power than HIMQ2.)
(I still think WKAQ is our prime suspect. -RG)

Randy Miltier: (11/85 CCI.)
1985: Thu 30 May Es ch 2 1645 PDT-- "Wheel of Fortune" and ads and promos (see 11/85 CCI.)
(not KWGN, they have no news. KNOP has mx at 6 & 10 but do they have Skip Baldwin?? -M. Parks)
Jim Pizzi: (11/85 CCI.)
1985: Sun 26 May Es ch 5 2240 MDT-- "Family Feud" (WMAQ. -Michael Parks.)
" " " " ch 4 2300 MDT-- end "At Issue" (WHPF carried this Sunday nights a few
years ago, Maybe they still do. -Michael Parks.)

TV IDs:

Robert Grant. (8/85 CCI.)

1985: Fri 10 May Es ch 3 1745 EDT-- "Little House O/T Prairie" (KOTA. -Michael Parks.)
 " " " " ch 5 1755 EDT-- "He-Man" (KIVV. -Michael Parks.)
 Mon 27 May Es ch 5 1300 EDT-- "Noon Edition" and ch 5 logo. (Definitely KHAS, the logo appears in TVG. -Michael Parks.) (TNX! This bags a new one for me that I have been trying for years to get. -RG) (A humorous note- The ad for KHAS news reads: "If you watch the news on a distant TV station, You are missing what's happening locally!")
 Fri 7 Jun Es ch 3 1835 EDT-- "Jeopardy" (KOTA. -Michael Parks.)
 Sat 8 Jun Es ch 3 1357 EDT-- "Market to Market" (a PBS, probably KOET. -Michael Parks)
 (11/85) Thu 8 Jul (?) Tr ch 5 0335 EDT-- missing child slide. (Definitely WMAQ. -Nathaniel Ely.)
 " " " " Tr ch 8 0425 EDT-- "CNN Headline Nx" (WQAD. -N. Ely & M. Parks.)
 " " " " ch 7 0430 EDT-- end "The Dating Game" (WIS. -N. Ely & M. Parks.)
 (Michael Parks points out my error that 7/18 is Thursday, not Friday. Now I am not sure if I logged these on Thu. 18th or Fri. 19th but I guess it doesn't matter. -RG)



DRAWING 1



DRAWING 2



DRAWING 3

I saw very heavy Au hash on the seventh and eighth of February. No IDs could be made, however. While this column is in the mail I will be giving the mysterious "Canis Majorids" MS I saw last year a Sirius effort (sorry, I couldn't resist, hi.) 73.

PHOTO-NEWS

David J. Nieman
 12284 Nice Road
 Akron, NY 14001
 U.S.A.

March starts off with:
 Nate Ely - Madison, WI



CKND-2
 Brandon-Minnesota, MB
 687 mile meteor-scatter
 seen Dec. 6, 85

[rece 1-9-86] [ne]



in
 cold
 storage

[rece 12-31-85] [ne]

WESTERN TV-DX

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

March 1986

Deadline: 4-10-86

New New Mode Tent. - t Unidentified - unid S/On - + S/Off - =
 ID Color Bars - @ Unid Color Bars - % IHTP - # Misc. Test Patterns - &

William Draeb, Ellis St., Rt. #2, Kewaunee, WI 54216

CST

Equipment: 7' Finco dish, B-T CMA-Ub preamp @ 93', .750 cable. Stacked Finco high band yagis with B-T AB-3 (tube type) preamp @ 100' with RG/11 cable. Second tower, 40', with Winegard CH-4026 (lo-band) and Winegard SC713 (hi-band) yagis. Hi-band uses AB-300 preamp. Zenith 14N22 table model 23" b&w (1971) with B-T BTU-2s UHF converter (used for UHF and also the stacked hi-band yagis) and Zenith 16J20 19" b&w (early 60's) (used with antennas on 40' tower), and Panasonic 9" b&w portable.

November 1985		December 1985		20 tr 2144		WKLE 46 KY 473	
5 Es 2100	KENW 3 NM	21 Es 1830	unids chs 2-6 s	2156	WKPC 15 KY 437	21 tr 0600	WNED 17 NY 445
	KAMR 4 TX		(LA tentatively				WUTV 29 NY 445
6 tr 0555	Central IL UHF's		on chs 2, 4, 6)				WSEE 35 PA 405
	0640 KDNL 30 MO 432	January 1986					CIII22 22 ON
	KNLCt 24 MO	20 tr 2100	WDRB 41 KY 437	0730			CFMT 47 ON 410
16 Es 2105	unid ch 2 west		WGRB 34 KY				

That's the extent of the DX for now. I think there will be more frequent tropo openings coming though, I hope.

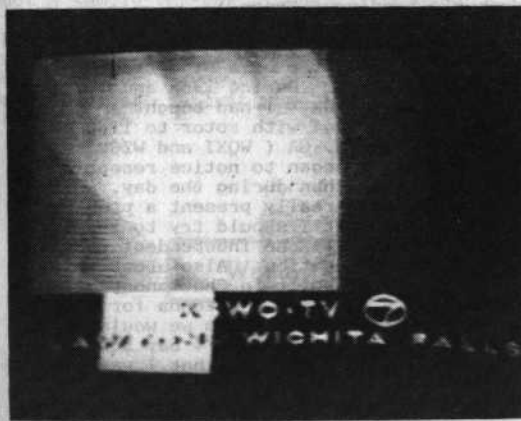
Local WSCO-14 has extended their broadcast day a bit. They used to sign off at 2215 seven days a week, but now they stay on until 2300. I don't know where they're getting the financial support to do so. Every fund raiser they had, they came up way short. The last one they raised about half of their goal. They are also experimenting with picking up an off the air signal for re-broadcast from WVCY-30 which is about 160 miles away. They have four Channel Master 7 foot dishes stacked 2 x 2 at 350 feet on their tower. The station manager said they aren't all "tuned up" and working right yet because of the cold weather we've had lately. Along with the dishes, they're using various preamplifiers, etc. The brand names weren't mentioned. I think they're expecting too much if they think they're going to get a usable signal for rebroadcast. I wrote a letter to them saying as much, but no response.

Not much local station news that I haven't already mentioned. A couple of weeks ago WXCZ-32 was off for five days straight. I called them up to find out why and was told they had "major transmitter problems."

That's about all for now. 73's, Bill

(Thanks for the report. fm)

PHOTO-NEWS continued



...our last DX picture is from:
 Jim Pizzi
 Lovington, NM

KSUD-7
 Lawton, OK
 294 mile tropo
 seen Nov. 29, 85

[rece 12-21-85] [jp]

TV-DX

A

STORY

ABOUT CLOSE ENCOUNTERS

BY MICHAEL HOLLIS

I assume all TV-DXers get introduced to this fascinating hobby through various sources. (i.e., shortwave DX, amateur radio, or a friend being a TV-DXer) My real introduction to TV DXing came as a mere accident. My electronic hobbies had caused me to cross it's path numerous times but it wasn't until sometime later that I learned what TV DXing was really all about.

Well, starting from the beginning, during the summer of 1968, I was working with a television repair shop as a summer helper in order to make some spending money. I had selected this type of work because of my electronic interests as a Novice Amateur radio operator. During this summer I spent most of my time installing and repairing television antennas. I lived in a small northwestern Alabama town (Russellville) where most of our customers had to have large antenna systems with rotors to receive good reception. I especially remember a close encounter with TV-DX early one June morning. After installing a large VHF yagi and UHF 8 bay bowtie with rotor on top of a 50 foot mast for one of our customers, my boss and I went inside to check out the reception. Well; the VHF reception to the southeast (Birmingham, AL channel 6 and channel 13) was normal. We rotated the antenna to the north to check the UHF reception (channel 15 Florence, AL) when we noticed another station on channel 6 before switching over to the UHF band. Interested in this station, we aligned the antenna for the strongest signal and learned we were watching a station from Oklahoma. The people who we installed the antenna system for were impressed but my boss and I couldn't explain why a station from Oklahoma was rolling in that particular morning. On the way back to the shop; I thought about this unusual occurrence but still didn't know I was witnessing something TV-DXers call, tropospheric bending (tropo).

A year later, my parents moved to Chattanooga, TN where I finished high school. To my delight they bought a house on top of a high ridge which was excellent for FM and television reception. During 1969 and 1970 I had several encounters with both FM and TV DX. I had bought an FM stereo receiver and put up a 10 element FM yagi with rotor to listen to rock and roll stereo stations from Atlanta, GA (WQXI and WZGC). Atlanta was over a hundred miles away and I began to notice reception was better at night and early morning hours than during the day. Since I was in school most of the day, this didn't really present a problem. A fellow amateur radio operator suggested that I should try to receive Atlanta television stations as well; especially the independent station on channel 17 (WTCG) because of my high elevation. Also about this time, a new UHF television station was being built in Chattanooga (WRIP channel 61 now WDSI) which would require an outdoor antenna for good reception. After several weeks of convincing my parents we would need an outdoor UHF antenna; they agreed to let me install a 4 bay bowtie with our small VHF yagi and a rotor. I didn't mention that I was also

continued

TV-DX A Story About Close Encounters

interested in trying to receive the Atlanta television stations, especially channel 17. While my parents were out of town one weekend, I put-up the 4 bay bowtie so I could stay up late and watch Atlanta TV. The first night things were great with both VHF and UHF reception out to 150 miles. I thought to myself; why hadn't I thought of this before. Well; the next night, reception was not as good with even the Atlanta UHF stations snowy and fading at times. I thought to myself there must be a wire loose or something wrong because the reception the night before had been great. During the next year I stayed up late several times after the local stations signed off to catch nearby cities like Knoxville, Birmingham, Memphis and Nashville but never caught any real good tropo openings. Of course, I still didn't know what tropo, E-skip and all that stuff was about.

My next encounter with TV-DX came when I was stationed at Ft. Campbell, KY in 1978 with the army. I got a brain storm that my previous attempts with long distance television reception at my parents house may have failed because I was using modest antennas. I thought it would be great to be able to receive TV from Chattanooga which was about 160 miles away and be able to catch up on local news. I went to a local electronics distributor and bought the biggest VHF yagi available which happened to be the Channel Master Crossfire model 3617. I was disappointed again because a hundred miles was about as far as this antenna would reach. I tried adding a pre-amp to the antenna and found that only on certain occasions were stations from Chattanooga really watchable at 160 miles. Also, there was an independent UHF station in Nashville on channel 17, WZTV which was about 60 miles away. I should have better luck with something closer. I went again to the electronics distributor and bought the biggest UHF antenna they had which was a Finco model P-7. I was disappointed again as WZTV was transmitting with low power at that time and I couldn't raise my antenna high enough to get a good signal. I began to say to myself; this long distance television reception is for the birds. About a week later, I was over at a friends house watching TV with rabbit ears and we started receiving a spanish speaking station on channel 2. We watched for a few minutes in amazement. I was thinking to myself; this is crazy. I can hardly receive a good picture from a station only 60 miles away with a big antenna and my friend is receiving a Mexican television station with only rabbit ears. I'm confused!!!!

Of course the answer to any TV DXer was easy but still I knew nothing about TV DXing propagation. Later that year while looking through a copy of Communication World magazine which is now extinct, I stumbled across the Worldwide TV-FM DX Association. So I wrote to the club and got a sample VHF-UHF Digest. I remember the first time I looked at the VUD. A lot of it was like Greek to me but that was just the real beginning for me with TV DXing. Now after nine years with lots of stations logged, many photos and qsls. I wish I had stumbled onto the WTFDA sooner. Even after all these years; my TV DX enthusiasm hasn't wavered yet. I just sometimes think of all the TV DX I missed all those years.

Worldwide TV-FM DX Association

EASTERN TV-DX

Ecologically
APPROVED!

Void
where
prohibited
by law.

John F. Combs, prop.
2969 Herschel #7
Jacksonville FL 32205
(904) 389-2451

****NEW ADDRESS/PHONE****

DEADLINE: 1st

(EST)

March 1986 A.D. (NOT SOLD IN STORES)

Dave Nieman, Akron, NY 14001-9529

November 1985

5 Es 1757 KIMT-3 IA 720
1931 KTVS-3 CO 1250
7 Es 1230 KSNW-3 KS 1050
30 Tr 1615 WBNX-55 OH 205
Akron (testing)

December 1985

21 Es 1838 KTVS-3 CO 1250
29 Es 0834-0957 ch. 2 & 3 no IDs

January 1986

1 Tr 0900 WDEM-5 MI 275
2 Tr 1315 WBNG-12 NY 145
5 Es 0946-1030 ch 2 no IDs
7 Es 1015-1243 ch 2&3 no IDs
8 Es 1355-1538 ch 2&3 no IDs
14 Es 1345-1530 ch 2&3 no IDs
18 Tr 0930 WAQP-49 MI 278
0944 WSMH-66 MI 255

January 1986

18 Tr 1001 WKAR-23 MI 305
21 Tr 0026 WXMJ-17 MI 355
0030 WUHQ-41 MI 345
0204 WXYZ-7 MI 245
0217 WJRT-12 MI 255
0901 WGVG-35 MI 355
Dayton, OH area 16,22,26&45
1400 WBPY-33 WV 390

Equipment: 1982 Zenith 12" B&W w/t Teknika 6510 tuner. Antennas: C/M 1113 Quantum w/t C/M 0096C cartridge amp at 12' AG (802' ASL). C/M 4251 7' dish w/t Bionder-fongue CMA-4b pre-amp on crank-up tower at 41' AG (831' ASL), using RG-11 cable.

I'd like to thank Walter Patton who IDED my mystery channel 16 (Nov. 1985 VUD) as CBFT-9 Mont St. Michel, PQ (about 100 miles north of Ottawa, ON).

I'm temporarily using the Channel Master 1113 Quantum and 0096C pre-amp as winter in western New York is no time to be changing antennas. (No weather comments John).

(Hey, winters in North Florida aren't anything like those in your area, but they're not all sunshine and warm ocean breezes either! Besides, I'll take 20° and snow over 45° and rain any day. The latter feels much colder to me--jfc)

Robert Goodman, 2030 Hering Ave., Bronx NY 10461-1711

(EDT)

September 1984

22 Tr 2232 WBOG-16 MD 175
June 1985
7 Es 1231 KDLH-3* MN 995

June 1985

? Es 1301 WREG-3* TN 940
1740 unID-6
1750 WCCO-4 MN 1010

June 1985

23 Es 0847 WEDU-3 FL 1005
1118 WBAY-2 WI 755
August 1985
17 Tr 2230 WGCN-49? PA T

"Except for the two receptions at Valhalla (designated by *), all loggings were here. Can it really be this long since I reported to Eastern TV? Not that much there, really, unless I count the loads of unIDs. These include a 6/22/85 occasion when I got a good enough null on WCB3-2 to get full video DX through them. That wasn't as astounding as the WBAY-2 logging the next day, when I heard the audio through the local--not bad for "ears" in town! Also heard during the 9/22/84 tropo opening was a local ham 2-m repeater which a certain Rufus (KA4RPZ) was making with full quieting from Greenville NC."

(Nice to see you back in the column, Robert! Don't fret about the short report--I think getting ANY DX in New York City and environs is a feat in itself!--jfc)

Ed Frye, 317 Hooker Avenue, Poughkeepsie NY 12603-3111

"We are now preparing for our move to L.A.; therefore, this shall be my final contribution to Eastern TV-DX. With so much to accomplish between now and moving day, DXing is out of the question! I have, instead, spent those milder spells of January weather taking down my UHF/FM antenna system for shipment to CA. Since we've been counting on a move, I purposely designed my system to be "retrievable"--that meant saving all the cartons in which my equipment originally came, too! (Smart move--jfc) Regrettably, I'm leaving behind my CH-5200 VHF antenna and rotor. The elements of Chromstar antennas, once deployed, are virtually impossible to fold up without damaging either the equipment or one's fingers! Besides, the move will enable me to try out a new VHF antenna; the CH-5200 is 7 years old and showing it! For local UHF viewing during the transistion, I installed one of those unique-looking Radio Shack antennas, Model 15-1627 ("4-bay") in our attic with the CM 7477A preamp. This antenna, originated by Antennacraft as the "Hoverman," is substantially reviewed in the excellent Howard Sams book "TV Antennas and Signal Distribution Systems." I have used several of these inexpensive antennas under various conditions and can verify the author's claims of outstanding results....In closing, here are my Poughkeepsie DX totals: E-skip 14, Domestic VHF Tr 21, Domestic UHF Tr 40, Canadian VHF Tr 3, Total States 17, Total Provinces 1. Best UHF: WGVG-23 (345 mi.). Best E-skip: KBMC-3 (1370 mi.). Best VHF-hi Tr: CBOFT-9/CJOH-13 (270 mi.). 73's to everyone; see you in the "Western" pages, hopefully soon!"

(Good luck with the move, Ed, and thanks for all your contributions to this column. As for the "4-bay" UHF antenna, I too am a firm believer in the value of this extremely inexpensive item. They are easy to handle, lightweight, and yet deliver fine results. Moreover, they are well-suited for "remote" uses (like mountaintop DXing) and other temporary uses, as well as for apartment/condo dwellers who are restricted to indoor or attic antennas--jfc)

EASTERN TV-DX

March 1986

Anthony Mann, Dept. of Physics, L.S.U., Baton Rouge LA 70803-4001

(GMT)

"My visit to Australia coincided with some particularly intense summer Es conditions, notably over Xmas-New Year, when the MUF was over 144 mHz, at least over Eastern Australia. Two-hop Es at 144 mHz was observed briefly Dec. 26 at 2203 GMT from New Caledonia into Adelaide (then regular 1-hop into Brisbane)."

"From my parents' house in Perth I began observing Dec. 17 using a JIL SX-200 scanner and a CM 3617 antenna at 26 feet. Double-hop from Australian Ch. 0 and Ch. 1 xmters (1700-2300 miles) was in almost daily while multi-hop from New Zealand Ch. 1 and Ch. 2 xmters (3000-3400 miles) was noted Dec. 17,24-31 (except 26) and Jan. 1,7,8. For me, Es peaked on Dec. 29 and 30. On Dec. 29, Malaysian Chs. E2,E3,E4 (approx. 2500 miles) wafted in and out for 3 hours mid-afternoon while another double-hop opening to the east (single-hop at FM) was in progress. Initially, Chinese Ch. C1 vision (49.75 mHz) was present, indicating 4000 mile Es northward. However, Dec. 30 brought my most distant Es reception to date: KVZK-2 American Samoa at 4700 miles. This was between 0300 and 0420 GMT during an extremely intense opening to the east, starting at 0630 and lasting past 2300 (TVQ still in; all other Ch. 0's and 1's had signed off). The 59.75 mHz audio was quite strong and from the tape I was able to dig out "Saturday Journal" and the stn ID at 1144 "In American Samoa you're watching KVZK Television, channel two." KVZK-2 was received earlier that morning on color bars by TV & FM-DXer Todd Emslie of Sydney (at 2800 miles). Strangely, the Es clouds responsible for much 144 mHz DX and hours of low-powered FM-DX over Eastern Australia, resulted in only a few short-lived FM openings to Adelaide (1300 miles) at my QTH."

"This is probably my last contribution to your column and the WFFDA in general as I'm moving back to Australia (on March 10) where my address will be: 15 Tweeddale Rd., Applecross, W.A. 6153, Australia."

(We're sorry to see you go, Anthony, but I guess it's always nice to go home, regardless of what Thomas Wolfe says! Please do keep us posted on your activities; after all, this is the Worldwide TV-FM DX Association, and we don't often get reports from overseas. Especially reports as exciting as the above--probably making jaded DXers seethe with understandable envy! Best of luck to you in your DXing and in your work!--jfc)

John F. Combs, 2831 Selma, Jacksonville FL 32205 (LAST REPORT FROM THIS QTH)

(EST)

January 1986

3 Tr 0605 WTAT-24 SC 216
0605 WATC-26 (SC) 215
5 Es 1145-1228 unIDs-2-6
6 Tr 0820 SC U's 24,25,35
0820 WPTM-28? NC T
0820 WTVI-42 NC 343
0915 WPCQ-36 NC 347
0915 WJPM-33? SC T
0915 WLTX-19 SC 262

January 1986

6 Tr 0922 WNSC-30? SC T
0934 WFLP-22 NC 409
1944 WTAT-24 SC 216
1944 WRJA-27 SC 261
12 Tr 0630 WTAT-24 local qual.
0630 SC U's 26,35,49
2330 WEVU-26? FL T
13 Tr 0030 WTVX-34 FL 234
14 Es 1844+ Noted on 2

January 1986

14 Es 2130 KFDX-3 TX 1016
(MUF at least 92 mHz)
21 Tr 2330 WHMC-23 SC 294
2330 WJKA-26 NC 335
2330 WRJA-27 SC 261
2330 WOLO-25 SC 263
2330 WTAT-24 SC 216
2330 CGI Chs. 20,26
(Others--no time...)

CHANGE OF ADDRESS: As you hopefully have noted in the heading of this column, my address is changing. The new QTH is, unfortunately, a 1st floor apartment. Looks like I'll have to do whatever I can do with indoor antennas. Oh well--maybe the summer Es season will be a winner this year!! Interesting to note WTVI-42 on 1/6 in with a watchable signal while WPCQ-36 not present at all!! 42's new xmttr/QTH/power seem to help--I've never seen more than a very weak signal from them in the past. Any members having good ideas concerning indoor antennas, please write!

WMTV UPDATE: I received another letter from the operator of pirate station WMTV in Delray Beach FL. This is the last bit of publicity I'll give these guys--OK? I quote him: "We are a true pirate--unconventional to the bloody end! Some of our more noted hijinks include running our 96.3 mHz xmttr from the belly of a Cessna at 1500 feet! Also last October we shut down a local AM stn and loaded our 7,425 KHz xmttr on 2 of the stn's arrays. That caused quite a stir! (Hmmm... can't imagine why--jfc) WMTV Channel 3 TV is an XXX-rated format featuring the best in erotic video available, always after midnight of course." Of course. A bit flaky; still, the 96.3 FM is a good challenge to the FMers, and the Ch. 3 might just be seen if you have Es late at night to FL, have an open Ch. 3 locally, and WEDU-3 is off-air. From the description of the programming, you probably wouldn't mistake WMTV for WEDU, hi!

I HOPE... that the last part of this column is legible. My good ribbon cartridge ran out, and I was forced to use a nylon ribbon that has seen better days. The other good film ribbons are packed. Here's hoping that some of that good Australian DX drifts our way!! It's been real...JOHN.

WMTV FM STEREO 96.3
WMTV AM 1610 KHZ
WMTV CH 3 TV
WMTV SW 7.4-7.45



W M T V

FREE RADIO'S BEST ROCK

(Above logo from WMTV's
QSL/info letter...)

STATION BREAK

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

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

FOR SALE - Channel Master #0236C Spartan II amp, VHF/FM/UHF 300-ohm w/split VHF/UHF inputs, switchable, tuneable FM trap. Gain: VHF 17 dB, FM 15, UHF 22 dB, 3.0 to 4.0 dB noise figure, Slightly used, very good condition. \$40.00. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

FOR SALE - Sony SRF A-100, AM stereo-FM stereo radio with batteries, no AC adapter included. Has AM stereo A-B switch for C-Quam and Kahn systems. No headphones, but has headphone jack and built in stereo speakers. Like new, \$100 (no SCA modification built in or on) from Bruce Elving - 241 Anderson Road - Esko MN 55733-9413. (218) 879-7676. Price includes shipping.

FOR SALE - Winegard DA-8150 82 channel post amp, FM also. Gain VHF 17 dB, UHF 21 dB. Max. noise figure 3.3 dB. Brand new condition; \$50.00 plus shipping. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

FOR SALE - Bumper stickers for the promo enthusiast. \$1.00 for 5, \$1.50 for 10, \$3.00 for 20 or \$5.00 for all 35, plus postage, must sell. Eric Bueneman - 836 Lamplight Lane - Hazelwood MO 63042-3407.

FOR SALE - Channel Master #7478 Super Titan amp; UHF with VHF feed thru if needed. Definitely a quality commercial MATV piece of equipment. Noise figure 3.0 dB, gain 28 dB. Brand new, \$65.00. Rich Wertman - 315 Pine St. - Lockport NY 14094. (716) 434-3988.

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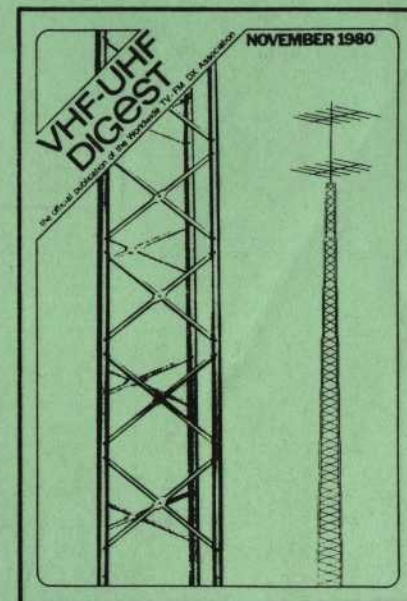
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