

# From The STAFF

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

COME TO THE 1983 W.T.F.D.A. CONVENTION!...We're hoping to see you at your club's annual convention. Once again, Dunkirk, NY will be the site. The area is one of the best VHF/UHF DX sites in the Northeast, and what can be seen and heard from the hills in the region (actually part of the edge of the Appalachian Mountains) has to be experienced firsthand. Several past DX conventions have been held there, and almost every time, long-haul tropo ducting was noted! It seems to be a superb area for almost all types of DXing, just far enough away from big-city RF overload to really try out antennas, amplifiers, and receivers--and that's what your host, pioneer TV DXer Bob Seybold, is planning. In addition to DXing equipment set-ups and demonstrations, Bob's lining up tours of a public broadcasting facility in Erie, PA. The Dunkirk area also features a unique local TV translator network with the ability to originate neighborhood programming--a forerunner of the LPTV concept. Bob also hopes to be able to fit this into a busy schedule. In addition, the area is the location of an FM translator site! This month's issue features a registration form. We hope to see you at Dunkirk, home of the VHF/UHF DXer's "grapevine!"

ANNOUNCING THE W.T.F.D.A. T-SHIRT...Show everyone you're a W.T.F.D.A. member! The W.T.F.D.A. T-shirt is now available, and it comes in colors. A real bargain at only \$7.00, because the price includes postage and handling. Details appear on page 22. Order today--supply is limited!!!

W.T.F.D.A. SUPPLY CHANGES...If you have ordered W.T.F.D.A. supplies lately, we ask for you to be patient. We're shifting supply handling to the Buffalo HQ address, and delays are a result. Mike Ehrhardt has volunteered to process club supply orders, and using the new Buffalo club Headquarters address promises to speed up things greatly. A big thanks go to Mike for his assistance--and to you for being patient. We plan to get your supplies out as promptly as the VUD from now on.

COLUMN NEWS...A scheduled article (part 3 in a series) on a homemade FM antenna did not arrive by deadline. Maybe next month...No CENTRAL FM column, due to a poor spring DX season so far!

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# TELEVISION NEWS

RETROSPECT:  
MORE FROM THE EARLY YEARS OF TELEVISION DX'ING

While leafing through some of Tom Yingling's back issues of the VHF-UHF Digest, I came across the January, 1978 issue, marking the tenth anniversary of the W.T.F.D.A. In that issue were a few articles relating to the current theme of RETROSPECT, so I felt it appropriate to include some of that material here. Much of this may be familiar to many, perhaps most of the membership, but there are also many newer members who, like I, haven't been very familiar with the backgrounds of this club. Also, Robert Goodman supplied me with some material on the so-called KLEE DX mystery, which is often raised as still a mystery. Since that story goes back to the early fifties, and is connected to the television situation at that time, I thought it should be included under this theme.

The story begins with Robert Cooper; the place is Ithaca, New York, and the date is May 27, 1950. Since the nearest television station is WHAM, channel six in Rochester, about 90 miles distant, a rather good quality antenna system was needed, and this included a preamp, a post-amp, a four-element yagi cut for channel six, and a receiver.

Then around 2:00 p.m. on May 27, another station started to come in: WMBR, channel 4 in Jacksonville, Florida. It was this event which got young Robert excited about television DX, and that excitement was shared with his friend, Ron de Neuf, and eventually other friends in the area. When the July, 1952 issue of Popular Science came out, with the article, "Kansas TV Fan Gets Both Coasts," (see last month's column) Robert was fascinated to learn that he and Ron weren't the only ones DX'ing television. Upon reading the article, Robert decided to monitor the lower VHF channels more regularly, and sure enough, he managed to get in Cuban television, also. After that, he managed to get others in the area interested in the hobby.

But in the summer of 1953 his parents moved to California. Robert stayed in New York at a summer camp and managed to sneak in a television and a rhombic antenna. Before rejoining his parents in California in August of that year, he had logged 52 of the 120 television stations in the United States at that time.

In order to remain in contact with his fellow DX'ers, Robert made a mailing list, and came up with the idea of printing a quarterly bulletin to be circulated to anybody interested. A club was formed, and came to be known as the American Ionospheric Propagation Association. The job of printing the newsletter changed hands occasionally, became a monthly newsletter in 1954, and continued for several years. In 1963 a new editor took over the job of printing the monthly bulletin, but he

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ceased publishing the bulletin without any prior notice, and the club ceased to exist. While many other DX clubs included VHF and UHF DX among other bands, there remained no other club devoted solely to VHF and UHF.

In 1965 Morrie Goldman and Gary Olson began their efforts to start up a new club for this purpose, digging up potential members from various sources. At the 1967 ANARC convention in Chicago Morrie suggested to the publisher of the dying World Monitors Radio Club that the club drop its all-band format and change to a TV-FM format.

The club then became the W.T.F.D.A. The first bulletin was dated September-October, 1967, and sent to members of the former WMRC, and to contacts made by Morrie and Gary over the past two years. It later became known as the W.T.F.D.A. or Worldwide TV-FM DX Association.

But just like anything else, there are the sincere advocates, and then there are the fakes. An article appeared in the May 13, 1954 issue of Business Week as a mere curiosity item taking only a few inches. "One of the wondrous beasts in Alice in Wonderland was the Cheshire Cat, which gradually faded away until only its smile remained. Houston has more or less the same thing--with a TV station.

"Ever since last September, KPRC-TV, Houston's channel 2 station, has been getting reports from England of what seems suspiciously like the cat's doings. Viewers there have written about seeing the call letters KLEE-TV on their screens, along with snatches of TV shows. Some have photographed the phenomenon, all have been puzzled by it.

"Now the mystery of it all is this: KLEE-TV used to be Houston's channel 2 station. But it went off the air in July, 1950, and its spot was taken over by KPRC-TV. Why should even its smile be lingering? And in Britain, of all places?

"In an effort to find an answer, KPRC-TV called on some of the top scientific brains at Rice Institute. These tended to dismiss the whole thing as signals being sent out by amateurs using unauthorized call letters.

"But then Rice professors probably don't believe in Cheshire Cats."  
Public fascination with the unexplained expanded the story, and by the time it hit the White Plains, New York, Reporter Dispatch it read (as quoted in the December, 1958 Reader's Digest, page 186): "Have you ever wondered what ultimately becomes of the waves that radio and TV stations send out into space 24 hours a day? Do they fade and vanish, or do they keep going forever? We do know that sometimes pictures appear mysteriously, long after a program has finished. One of the most famous of all such weird happenings was in England in September, 1953.

"Suddenly in many parts of England television screens blossomed out with the identification card and call letters of TV station KLEE in Houston, Texas. Even today transatlantic

programming is but a dream, so several viewers took pictures of the image to prove the happening.

"What really startled the TV world was the fact that when British broadcasting engineers advised KLEE in Houston of the unusual event, they were told that the station had been off the air since 1950. No KLEE identification card had been shown for the past three years.

"Where had that picture been for three years? Why did it appear only in England and how did it get back from wherever it had been? Does make you wonder, doesn't it?"

The story began when KPRC-TV became flooded with letters from British viewers asking the president of KLEE to verify their reception reports, some of which included photographs of the KLEE ID slide. The chief engineer of KPRC-TV replied that it was definitely not a real ID slide. For one thing, the station was KLEE-TV, not KLEE, as was shown on the photographs. Also, the real ID slide included the caption, "Channel 2, Houston, the Eyes of Texas," which was not included on the photographs. Nor did the photographs show a map of Texas, as did the ID slide. He replied that they were probably watching a commercial for KLEENEX tissues at the time.

But KLEE-TV pursued the matter further and checked to see if anybody on that channel had run a Kleenex commercial around 10:50 a.m. EST on September 14, 1953, the time of the reported event. When the Kleenex idea fizzled, KLEE-TV wrote to one of the original observers for more information.

The observer replied that he was a partner in a business enterprise to build television sets designed to receive television signals from the United States. The set used for the DX was one he designed himself: a highly sensitive super-heterodyne set with United States transmission standards, and an invention called a light cell. Instead of using an antenna, the light cell was attached to the set, and could be rotated in any direction in order to receive different stations.

Further investigation by KPRC-TV found other strange facts. Several other stations in the United States have been QSL'ed by the same people, and the reception reports turned out to be form letters. There were more photographs of call letters from other stations. All the photographs taken were only of ID slides and nothing else. And some of the letters on the ID slides looked like they had been stenciled. There were even photographs of Russian ID slides with English letters.

Eventually the real story began to unfold. A few Englishmen got together and decided to convince unsuspecting victims that they had an invention that could receive foreign television stations. So they projected faked ID slides of various stations on a television screen and allowed people to photograph the screen, and encouraged them to write to the stations to have them verified. And many of the stations verified their reception report. But they made one fatal mistake: the faked an ID slide of an American station that was no longer on the air.

#### APPLICATIONS FOR NEW BROADCAST TV STATIONS

CH	ERP	HAAT	STATE/CITY/APPLICANT
17	268	419	AL Tuscaloosa; Ch. 17 of Tuscall'a
44	5000	1586	CA Rancho Palos Verdes; Channel 44 Associates
44	5000	1402	CA Rancho Palos Verdes; California Telecasters
44	5000	1217	CA Rancho Palos Verdes; Ch.44 Inc
44	5000	1376	CA Rancho Palos Verdes; Palos Verdes Broadcasting Co., Inc.
44	5000	1694	CA Rancho Palos Verdes; Rancho Palos Verdes Broadcasters, Inc.
44	5000	1581	CA Rancho Palos Verdes; Springfield Television Corporation
26	1414	655	CO Pueblo; Pueblo Communications
68	1000	511	IL Danville; George E. Gunter
23	2190	414	IA Ames; Metro Program Network
69	1400	149	IA Des Moines; Federal Telev. Co.
48	1300	334	KY Owensboro; Volunteer Communications Society
44	5000	1975	LA Baton Rouge; Louisiana Communications Limited Partnership
32	1000	1174	MA Greenfield; Petitioner's Society for Access Telecasting
25	2500	1363	MS Gulfport; Four-0 Inc (amended)
7	100	1813	NV Winnemucca; Matlock Communi's
25	1400	184	NM Carlsbad; Citizens Rights Telecommunications Company
62	1996	1776	NC Asheville; George E. Gunter
66	1500	364	NC Forest City; Citizens Rights Telecommunications Company
68	1000	1327	OH Mansfield; Eagle Broadcasting
14	1000	1046	WA Walla Walla; Brotherhood Bc'g
29	1000	360	WV Charleston; Stanley G. Emert
27	10.6	990	VI Christiansted; Joseph Bahr
44	1099	276	VA Danville; Volunteer Communications Society

#### CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS

26	3056	251	FL Daytona Beach; Daytona Beach Television Association, Ltd.
69	4786	1015	FL Hollywood; Whitco Broadcasters
32	132	785	GA Toccoa; Stephens County Bc'g.
16	179	1025	IL Quincy; Believer's Broadc'g
14	5000	1478	NC Greenville; Elcom, Inc.
45	5000	1145	OH Dayton; Sinder Broadcasting
48	100	858	PR Ponce; Zeal Broadcasting
16	5000	1275	WA Everett; Unity Broadcasting
39	236	663	WI Marshfield; Wisconsin Telev'n

#### APPLICATIONS RETURNED

- Wichita, KS; ch. 33; George E. Gunter
- Louisville, KY; ch. 41; Louisville Family TV

#### APPLICATIONS DISMISSED

- Quincy, IL; ch. 16; Wooster Republican Printing Company
- Ponce, PR; ch. 48; Alvarez & Escabi
- Everett, WA; ch. 16; Channel 16, Inc.; Greater Everett Telecasters; Oak Television of Everett, Inc.
- Hollywood, FL; ch. 69; Christian Media of Florida, Inc.; Family Television 69, Inc.; Golden East Broadcasters, Inc.
- Daytona Beach, FL; ch. 26; Daytona Beach Broadcasting Company, Inc.; Life Style Broadcasting, Inc.
- Dayton, OH; ch. 45; Channel 45 Company; Dayton Telecasting, Inc.
- Ayden, NC; ch. 14; Behrvision of North Carolina; Telecommunications Partners, Ltd.(Greenville, N.C.)

CONSTRUCTION PERMIT MODIFICATIONS APPLIED FOR				CALL LETTERS GRANTED: NEW STATIONS			
53	5000	713	FL Fort Walton Beach; Fort Walton Beach Broadcasting Corp.	WTRA	16	PR	Mayaguez; Ramon R. Nieves
49	n.c.	940	MI Saginaw; Saginaw Communic'n.s.	WTJP	60	AL	Gadsden; Sterling Associates
19	2512	1194	PA Johnstown; WFAI-TV	KLEP	17	AR	Newark; Newark Public Schools
44	1411	1011	AL Gadsden; WJPR (from ch. 60)	WJPR	21	VA	Lynchburg; Lynchburg TV Assoc.
51	5000	1283	TX Longview; KLMG-TV	KBOM	4	KS	Colby; Samuel A. Lunsway
43	156	600	SC Myrtle Beach; WGSE-TV	CALL LETTERS ASSIGNED: CHANGE EXISTING			
15	3.5	123	ND Fargo; KVNJ-TV	KDVR	31	CO	Denver; KTMX-TV
30	n.c.	942	PR San Juan; WRWR-TV	KPDX	49	WA	Vancouver; KLRK
CONSTRUCTION PERMIT MODIFICATION GRANTED				WDLI	17	OH	Canton; WJAN
26	2845	1610	WI Green Bay; WLRE (increase from previous 501.27 kw PTA & CP MOD; 940' increase in antenna height; same TL.)	CHANGES IN CITY OF IDENTIFICATION APPLIED FOR			
31	5000	1038	CO Denver; KTMX-TV	• WCEE, ch. 13, Mount Vernon, Illinois, to identify as Mount Vernon-Salem-Centralia.			
34	600	1030	KY Campbellsville; WGRB	CHANGES IN CITY OF IDENTIFICATION GRANTED			
29	748	432	LA Lake Charles; KVHP	• WPBT, channel 2 in Miami, Florida, to identify as Miami-Fort Lauderdale.			
17	126	520	AR Newark; KLEP	• WFTS-TV, channel 28 in Tampa, Florida, to identify as Tampa-St. Petersburg.			
22	1396	1959	WA Spokane; KSKN	NEW STATIONS ON THE AIR			
22	51.7	1928	CA Cotati; KRCC-TV	• WGRB, channel 34, Campbellsville, Kentucky, began operation April 7, 1983. 588 kw max. & 380 kw horizontal (circular polarization). 1033' AAT, 949' AG, 1849' ASL. TL on Hwy 55, 4.1 miles north of Columbia. Coordinates 37°10'05"; 85°18'32". Address: Green River Broadcasting Company, Route 1, Gane Valley, KY, 42720. As far as I can tell, Campbellsville is not within the grade B contour of any television station, so look for network affiliation for WGRB.			
61	500	564	NC Greensboro; WLXI-TV	• KWSE, channel 4, Williston, North Dakota, went on the air April 8, 1983. 100 kw ERP; 912' AAT; 819' AG; 3082' ASL. TL 12 miles west of Williston (about 2 miles slightly north of due west from transmitter tower of KUMV-TV, channel 8, and 1/2 mile northwest of transmitter of KXMD-TV, channel 11. Coordinates 48°08'30"; 103°53'34". Address: Prairie Public Television, 4500 S. University Drive, Fargo, ND, 58103. PBS affiliate.			
53	5000	713	FL Fort Walton Beach; WPAN	• WMKW-TV, channel 30, Memphis, Tennessee, went on the air April 18, 1983. 2500 kw max. & 1009.3 kw horizontal (circular polarization); 1002' AAT; 1114' AG; 1449' ASL. TL WKNO tower, 2.5 miles northeast of Memphis, on L&N Railroad. Coordinates 35°09'17"; 89°49'20". Address: Television Corp. of Memphis, 2876 Director's Cove, Memphis, TN, 38131.			
28	1330	810	MA New Bedford; WFDG	• TWTC, channel 40, Tallahassee, Florida, went on the air April 21, 1983. 3390 kw max. & 750 kw hor.; 880' AAT; 854' AG; 1049' ASL. TL 2.2 miles northwest of Bradfordville; coordinates 30°35'19"; 84°14'05". Address: Holt-Robinson Television, 8440 Deer Lake Rd., Tallahassee, FL, 32312.			
APPLICATION FOR C.P. TO CHANGE FACILITIES				CONSOLIDATED HEARINGS			
40	5000	1962	CA Sacramento; KTXL (change TL)	• Missoula, Montana; channel 17; James A. Bender; Owen Broadcasting Enterprises.			
CHANGES IN EXISTING FACILITIES GRANTED				• Cape Coral, Florida; channel 36; Cape Coral Broadcast Production and Management Corporation; Florida Family Broadcasting, Ltd.; South Jersey Radio, Inc.; Powell Broadcasting Company; Coastal Telecasting Corporation; Florida Metro Broadcasting, Inc.			
32	1333	n.c.	CA San Francisco; KQEC (previously 1330 kw Max. & 513 kw Hor.; now only horizontal)				
49	94	1285	NH Littleton; WLED-TV (formerly 36.7 kw and 1280'; HAAT is probably change from refiguring and not an actual change)				
46	500	n.c.	NY Binghamton; WSKG (formerly 1200 kw max & 1000 kw hor. now horizontal only; change effective 2/21/1983)				
11	50.7	n.c.	AK Anchorage; KTVA (ex 26.3 kw)				
30	200	n.c.	IN Bloomington; WRTU (formerly 214 kw max. & 200 kw hor. so don't expect any change)				
3	n.c.	746	OR KVDO-TV (change city of license from Salem to Bend, OR; TL to Awrey Butte, one mile NW of Bend, on or next to KTVZ ch. 21 tower, but 135' higher than KTVZ. 746' AAT, 299' AG, 4519' ASL. Coordinates 44°04'41"; 121°19'57". New site is 104 miles SW of salem site.)				
APPLICATIONS FOR CALL LETTERS: NEW STATIONS							
C.L.	CH STATE/CITY/APPLICANT						
WNEG-TV	32	GA	Toccoa; Stephens County Bc'g Co				
WTRJ	16	IL	Quincy; Believer's Broadcasting				
KITF	11	MN	International Falls; Jn.W.Boyer				
WNAC	30	TN	Nashville; Television Corporation of Tennessee				
KCTZ	7	MT	Bozeman; Bee Broadcasting, Inc.				
CALL LETTER CHANGES APPLIED FOR							
KMCT-TV	39	LA	West Monroe; KNAN-TV				
KNDX	2	ND	Dickinson; KDIX-TV				
WNFT	47	FL	Jacksonville; WXAO-TV				
WEVV	44	IN	Evansville; WAFV				

- Cape Coral, FL; channel 36; Florida Family Broadcasting, Ltd.; South Jersey Radio, Inc.; Powell Broadcasting Company; Coastal Tele-casting Corporation; Florida Metro Broadcasting, Inc.
- Portsmouth, Ohio; channel 30; Radio Station WPAY, Inc.; Janesville Broadcasting Company.
- Manchester, New Hampshire; channel 60; Showair, Inc (plans to use STV); Janesville Broadcasting Company; Golden Triangle TV 60 (specifying Merrimack as proposed community of license).
- Pensacola, Florida; channel 44; Great Western Communications; Carnex TV, Inc. Carnex proposes a much greater ERP and HAAT than Great Western, so coverage area and population within the proposed Grade B contour will be a factor in the hearings.
- Humacao, Puerto Rico; channel 68; Naguabo Broadcasters (specifying Naguabo as proposed community of license; 93 kW ERP; 775' AAT); Boncanegra/Girard Broadcasting Group (825.91 kW ERP; 773' AAT). Because of differences in ERP and HAAT, proposed coverage areas will be a factor in this hearing.
- Del Rio, Texas; channel 10; Owen Broadcasting Enterprises; Del Rio Communications, Inc.

## RESULTS OF CONSOLIDATED HEARINGS

- Hollywood, Florida; channel 69; construction permit granted to Whitco Broadcasters, Inc. (preference given because it is entirely minority-owned) Applications by Family Television 69, Inc., Golden East Broadcasters, Inc., and Christian Media of Florida, Inc., were dismissed.
- Dayton, Ohio; channel 45; construction permit was granted to Sinder Broadcasting of Ohio, Inc. Applications by Dayton Telecasting, Inc., and Channel 45 Company were dismissed.

## SPOTLIGHT ON NEW STATIONS

It's interesting how different stations respond to your request for information. I wrote to several of the new stations reported last month, and got only one reply, from KSPR, channel 33 in Springfield, Missouri. But Joette Zieverink, promotion director of KSPR, was very helpful in sending quite a bit of information about the station. KSPR went on the air at 7:00 p.m. on March 9, 1983. Their schedule is from 6:00 am until midnight on weeknights, and until 12:30 am on weekends. KSPR is an independent station. The transmitter, an RCA TTU-55C with an ERP of 1122 kW, is located in Fordland, Missouri, standing 1079' above average terrain, and covering an area from 35 to 50 miles from the tower. The schedule consists of three movies daily, old syndicated programs, a few satellite-relayed syndicated programs, and a few locally-originated programs.

Robert G. West, program director, was the program manager for KGCT-TV, channel 41 in Tulsa, while attending college there. Production manager Rhed Khilling comes from KPOM-TV in Fort Smith, Arkansas. Traffic manager Barbara Gressel came from WTHR-TV in Indianapolis. General manager Donald W. O'Connor has had experience as national sales manager

for several television stations.

Let me add one note to this part of the column. Press releases are the best source of information on what type of station you can expect. And although the stations rarely reply to my requests for information, local newspapers usually carry articles on a station about the time it goes on the air. So keep an eye out for newspaper clippings.



## RE-EXAMINATION OF TECHNICAL REGULATIONS

This came in the April 4, 1983 Federal Register, just as I finished last month's column, so I didn't have the time to cover it fully. For the past few years the FCC has been taking on a policy of deregulation. This has been evident in its actions on STV, IPTV, licensing policies, teletext, Berwick doctrine and De Facto reallocation, and many other areas. Not only is the FCC eliminating rules which it feels are either needless or can be better handled by the marketplace or other government agencies, but it has also avoided making rules whenever it can. In this action, the FCC is reviewing its entire regulatory framework, seeking public response on what rules are unnecessary, what rules create undue hardships, which rules are outdated, which rules need to be modified, and which rules should be kept.

The purpose of the proceeding is to examine certain of the FCC's technical regulations with the ultimate intent of eliminating those that no longer serve useful purposes, replacing those that are overly burdensome with less constraining regulations or retaining those which are acceptable as is, without undermining the FCC's responsibilities under the Communications Act of 1934. Technical regulations cover two areas: those of an engineering nature which govern the public's use of the frequency spectrum, and those governing characteristics of electronic equipment, such as licensed transmitters, nonlicensed radio devices which are capable of radiating electromagnetic energy but do not require licenses, and rules governing CATV and telephone equipment.

There are several reasons for the FCC's decision to examine its rules. (1) It is possible that some technical regulations, such as those serving as standardizing rules, may have been useful in introducing a new service or system, but may not be needed now that the service has matured. (2) Existing rules may be so rigid as to preclude the development of other, more desirable services. (3) Increase in competitiveness in the marketplace lessens some of the FCC's concerns of the market-structure, thus less need for government involvement. (4) Alternative regulatory approaches may be possible with fewer constraints on technological innovation.

Existing technical regulations are of three basic types: performance regulations, design regulations, and conduct regulations. Performance requirements form the basis for all technical regulations. Design require-

ments are more specific and detailed, in order to remove any ambiguity in design requirements, but may become too restrictive for any future technology. Conduct requirements act to check performance by ensuring that licensees meet performance requirements. An example in television would be picture quality. Performance requirements set basic standards for color, frequency response, modulation, etc. Design requirements put test signals in the vertical blanking interval of stations using remote control transmitters. Conduct requirements required that engineers at the station periodically monitor those signals to ensure that the transmitted picture meets certain standards. The test signal ruling, as a design requirement, was useful at the time, but now not only does advanced technology make it unnecessary, but it became a hindrance to the viability of teletext. Outmoded design standards for translators became a hindrance to the development of low power television. The FCC feels that where performance requirements are sufficient, design and conduct requirements backing them up are unnecessary, and in some cases, a hindrance to technological development.

In addition to these three types of regulation, technical regulations can also be grouped into four categories according to regulatory purpose of function. These four categories are: (1) quality standards on telecommunications services and equipment; (2) standards to ensure interoperability among various pieces of equipment; (3) standards for interference control; and (4) standards for spectrum efficiency. Under the Communications Act, the FCC has limited control over telecommunications equipment. Under Section 302 it can regulate equipment which emits radiation in order to prevent interference, and can regulate receivers in order to reduce their susceptibility to interference under Section 303.

The FCC is taking a two-step approach to reassessing its rules. First, consider the conditions under which technical regulations may be needed in achieving each goal, and second, where there is an apparent need for regulation, to consider the possibility of regulatory alternatives which may be less constraining, or, where there is no apparent need for the regulation, to drop it entirely.

QUALITY STANDARDS: there are two groups of quality standards being considered here. System compatibility standards require the use of specific transmission formats so that receivers can adequately receive and demodulate the transmitted signal. Minimum performance standards guarantee a minimum level of service, and are related somewhat to standards for effective spectrum use. Field strength, maximum allowable distortion, and minimum modulation fall under this category. Most cable television outlets have held to a quality well above the FCC's requirements. And with competition in the marketplace being at a high pace, the FCC feels that common carrier services will be forced to uphold high technical standards without the need for

FCC intervention. The current level of competition in the broadcast services should also make FCC intervention unnecessary.

INTEROPERABILITY: This refers to the capability of electronic equipment used by one person or business to operate with, or interconnect with, equipment used by others. In broadcast services interoperability is essential. In a private communications system where all the interconnected transmitters and receivers are controlled by a single licensee interoperability with other systems is not essential. In maritime and aeronautical services interoperability is essential as a safety factor. Interoperability can be achieved through two means: common signal characteristics or through the use of converters. Pay television is one example of a converter used in a situation where the transmitted signal and the receiver are not interoperable. NTSC color television standards are another example of interoperability standards. The FCC recently decided not to adopt any interoperability rules with respect to the new AM stereo and teletext technologies.

(I have trouble here distinguishing between interoperability and the previously mentioned system compatibility standards. In fact, the FCC notice used NTSC standards as an example for both. But the FCC defines interoperability as "a dynamic form of compatibility.")

In some services interoperability is a required safety factor, often mandated by treaty. (marine VHF service, for example) The FCC will not attempt to provide technical flexibility by eliminating any rules which are essential to safety. But in services where interoperability is not an essential safety factor, the FCC is looking into the feasibility of eliminating obsolete rules.

INTERFERENCE CONTROL: It was interference between AM radio stations in the early 1920's which led to the creation of the Federal Radio Commission, which later became the Federal Communications Commission. Interference protection is an essential part of the FCC. There are three ways to control interference. First is by overall bandwidth/power related rules, which also involves antenna height, effective radiated power, directional signals, and polarization. Second are Frequency Tolerance rules which regulate departure of a transmitter from its assigned frequency. Third are Modulation rules. The bandwidth/power-related rules are by far the most important in controlling interference. So the FCC is pondering the question, to what extent would elimination of the other two types of interference control rules would increase system design flexibility, and to what extent would it cause an increase in interference?

SPECTRUM EFFICIENCY: While frequency tolerance and modulation rules also result in determining how much of the radio spectrum is needed for a given output, spectrum efficiency rules determine the bandwidth for each particular radio service. For example, a broadcast television channel is 6 MHz wide. UHF land mobile uses are authorized a maximum bandwidth of 25 KHz for each voice channel.

Certain bands, however, are not limited to a single function, but can be used for voice, code, or data transmission, and one function would require a wider channel than another. Since channel widths in those bands are wide enough for any of the services allotted to that band, some services would leave wasted spectrum. The FCC is looking into the possibility that there may be a better method of spectrum efficiency than the present rules.

The FCC is opening the matter to the public for response before making any decisions. As far as broadcast television is concerned, the rules under question are: separations, power and antenna height requirements, transmission standards, field intensity contours, transmitter location and antenna system, transmission system requirements, and TV engineering charts. With respect to FM stations, the following rules are under consideration: minimum mileage separation between co-channel and adjacent-channel stations, power and antenna height requirements, stations at spacing below the minimum separations, equipment performance measurements, determining and maintenance of operating power, modulation, frequency tolerance, stereophonic broadcasting, antenna systems, transmission system requirements, subsidiary communications multiplex operations' engineering standards, stereophonic transmission standards.

#### MORE DEREGULATION: BROADCAST CALL LETTERS!

The present rules relating to call letters are the result of the FCC's 1973 action codifying existing FCC policies which were scattered throughout various decisions and public notices. The rules basically state that a station may request call letters of its own choice (except the initial letter, which is "K" for stations west of the Mississippi and "W" for stations to the east), if the letters are available, are in good taste, and are sufficiently dissimilar from existing call letters of stations in the same service area so that public confusion is unlikely. Also involved is the procedure for requesting call letters, the filing of objections to a proposed set of call letters, and reassignment of relinquished call letters. Now, after ten years, the FCC is studying its rules on call letters to see if any should be eliminated or modified.

The first issue involves the filing of objections to a request for call letters. An applicant for call letters must notify all broadcast stations within a 35-mile radius of the proposed station. After a FCC staff review, public notice is made of the application and a 30-day period follows during which objections may be filed. For the most part, objections have been raised to phonetic and rhythmic similarities between call signs. For example, radio station WJOC in New Jersey objected to the assignment of WWAC to channel 53 in Atlantic City. In more than 90% of the cases where objections were raised, they are dismissed and the call letters are assigned. And much of the FCC's time is taken up with frivolous objections. The FCC is proposing that it should not be the forum to resolve

call letter disputes. Instead, the FCC is proposing to process and grant all call letter requests, and leave it up to a local court to determine if a station should not be granted a certain set of call letters.

The rule mentioned previously about notifying broadcast stations within a 35-mile radius is looked on as outmoded, unnecessary, and burdensome, and its elimination would speed up the process for granting call letters. The rule providing for a 30-day holding period for the filing of objections may be reduced to 15 days.

Commonly-owned stations assigned to the same of adjoining communities may request conforming call letters under present rules. For example, Philadelphia has WCAU-TV, WCAU-FM, and WCAU(AM). WINZ (AM) is in Miami while WINZ-FM is in Miami Beach. The FCC has been waiving that rule with respect to stations up to three miles apart with no public confusion. Now the FCC sees no need for the rule limiting conforming call letters to the same or adjoining communities.

You're probably familiar with superstation WTBS, channel 17 in Atlanta. A few years ago WTBS was a ten-watt educational FM station in Cambridge, Massachusetts. But Ted Turner, owner of Turner Broadcasting System offered the station \$50,000. Half of it if the station gave up its call letters, and the other half if Turner succeeds in getting the call letters for himself. That's called trafficking. Considering this an abuse, the FCC adopted rules that all applicants for relinquished call letters within a subsequent 15-day period be given equal footing, with the letters to be awarded to the licensee with the longest continuous period of broadcast service. But now feeling that the public interest is in no way harmed by trafficking of call letters, the FCC is proposing to grant relinquished call letters to the first applicant.

Another rule prevents the reassignment of call letters to another station in the same community as the station which has relinquished it for a period of 180 days. This is to prevent the false impression that the other station is in any way connected with the first station. But this rule in no way serves the public interest, and confuses the true purpose of call letters: identification of the station, not of the licensee. The FCC also proposes elimination of this rule.

Certain letter combinations are also not available: these include call letters which include the initials of the President of the United States of a former President still living, or the initials of federal agencies. But WEPA managed to slip by in Eupora, Mississippi, and WRMN was in Elgin, Illinois before Nixon became President. Such instances do not appear to cause public confusion, and there is no indication that the public interest is served by these rules. Hence, the FCC's proposal to delete this rule, also.

Other issues relating to call letters are also being raised, such as the rule against call letters that are in bad taste or spell

out dirty words. Oh yes, one more issue being raised. Now hold onto your hat because this is going to be painful. The FCC is wondering whether or not call letters are really needed.

#### COMPLETE SET OF FCC REGULATIONS AVAILABLE

This is really a bad time to bring this up, but I didn't have the information available to me until this month.

The entire set of FCC regulations has been published in a four-volume set by the U.S. Government Printing Office. They come under Title 47, Telecommunications. The first volume deals with FCC organization and procedure, frequency allocations and radio treaty matters, commercial radio operators, radio frequency devices, antenna structures (construction, lighting, and marking), industrial and scientific equipment, and employee responsibilities and conduct. This volume cost \$8.50 and is stock number 022-003-95082-6. It covers parts 0 to 19 of Title 47.

The second volume covers parts 20 to 69, and deals with fixed and mobile services, satellite communications, telephone, telegraph, common carriers, tariffs. Cost is \$9.00. Stock number 022-003-95083-4.

The third volume, and one really worth owning, covers parts 70 to 79. It includes radio broadcast services (AM, FM, TV, SW), experimental and auxiliary services, cable television, and CATV relay services. Cost is \$8.00.

The fourth volume covers parts 80 to the end. It includes maritime and aviation services, private land-mobile radio, private operational-fixed microwave services, personal radio services, amateur radio, and disaster communications service. CB radio is also included. Aside from the FCC, it also has the national emergency plan for telecommunications in the event of nuclear war. Cost is \$9.00. Stock number 022-003-95085-1.

These volumes can be ordered separately or as a group. Send orders to:

Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC, 20402.

Orders from outside the United States or its possessions must add 25% to the prices listed above. No checks are accepted from

foreign countries, but International Postal Money Order made out to Superintendent of Documents is acceptable.

These volumes are revised as of October 1, 1982. Order yours now. Next year there might not be any regulations to print.

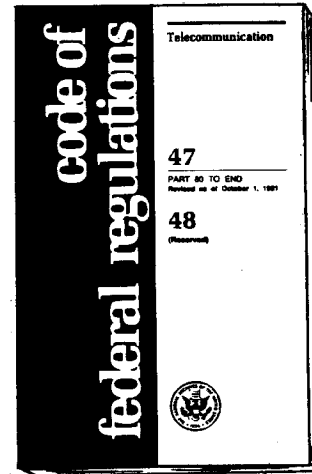
#### FORUM

John Ebeling confirms that KXLI, channel 41 in St. Cloud, is still boasting of 5.5 million watts. He also sent a clipping from the May 3 Minneapolis Star and Tribune about KTMA-TV, channel 23 in Minneapolis. Its SPECTRUM STV service offers three packages of service: movies, sports (Minnesota Twins and North Stars) and late night "R" rated movies. Subscribers for the movie package haven't quite reached the numbers they had hoped for. Subscribers for the sports package are far short of what they expected. WCCO-TV is filing a multi-million dollar lawsuit against Spectrum and the sports teams, charging violations of antitrust laws and breach of contract with WCCO. They in turn are filing lawsuits against WCCO.

Nathaniel Ely sent in a few comments about WLRE, channel 26 in Green Bay. They're offering free a five-element UHF antenna and 50 feet of coaxial cable for anyone upon request. Apparently an effort to gain more viewers. They are promoting themselves as "like a 24-hour cable TV channel for free."

According to Ronald Purdue, WTMB-TV (channel 43, Tomah, Wisconsin) and WWQI (channel 25 in LaCrosse, Wisconsin) don't seem to be anywhere near getting on the air. (I seem to remember that the LaCrosse application was gathering dust for a good many years before it was finally granted a construction permit) Ron recalls a channel 44 in Winona, Minnesota that was assigned back in 1967, and the petitioner for that channel applied for a broadcast station, got a construction permit and call letters KWIH-TV, and never got on the air. Ron also included an article from the 4/1/83 Rochester Post-Bulletin on an issue that's been coming up quite often recently: interference between channel six and the lower FM channels. When KFSI, 88.5 MHz in Austin, Minnesota went on the air, people were complaining about interference with channel six. The general manager of KFSI has been attempting to help people eliminate the problem. In July, 1981, the FCC made KFSI cut its power in half, and promised an answer to the problem in a few months. That was two years ago.

A few weeks ago Cliff Rames sent an article from the 2/14/83 Miami Herald. WKPX, an FM station on 88.5 MHz was scheduled to go on the air the next day, broadcasting rock and pop oldies. The station is run entirely by students of Piper High School, and has an effective radiated power of 3 kilowatts. Prior to its going on the air, Piper High students have been going to apartment buildings to install filters to prevent WKPX from interfering with WCIX-TV, channel six. WCIX-TV had filed protests with the FCC against WKPX, fearing that the station would cause interference with the audio portion of



channel six. Surely enough, another article, from the 5/4/83 Miami Herald, discusses the severity of the problem. Residents of Sunrise, Tamarac, Lauderdale, Lauderdale Lakes, and Margate are being plagued with interference on channel six from WXPX. Some people have complained of having lost channel six completely. A significant part of Broward County, within a four mile radius of the transmitter tower of WXPX, is unable to view channel six. Students of Piper High School have been busy for the past few months visiting residents who have called to complain about the interference. In many of the cases the problem has been resolved by showing residents how to adjust their fine tuner. Large apartment buildings and condos are solving the problem by installing 825 filters sold in North Miami.

Cliff also sent in a few articles on other subjects. From the 4/20/83 Miami Herald, an article about channel 69 in Hollywood, Florida. The FCC's administrative law judge selected Whitco as the winner of a construction permit over three other applicants. Preference was given on three points: Minority ownership, the fact the owners have no other media interests, and that the owners will be working full-time at the station in a position of management. The 4/16 Miami Herald has an article about channel seven in Miami. Its present call letters, WKMT, stood for Cox Newspapers, Knight Newspapers, and Niles Trammell, three principal owners of the station when it went on the air back in 1956. Now it will change its call letters to WSVN on June 7. The idea is to retain its identity, despite the fact that it appears on different channels on different cable companies. From the 5/3/83 Miami Herald, an article on WCIJ-TV, channel six in Miami. Taft Broadcasting of Cincinnati just took over the station, and is planning a few changes in the future, such as more current off-network syndicated programs, expanded news operation, coverage of the Philadelphia Phillies baseball games (owned by Taft), and better movies.

**DIRECT BROADCAST SATELLITES: WHAT THE UNITED STATES HOPES FOR IN RARC-83**

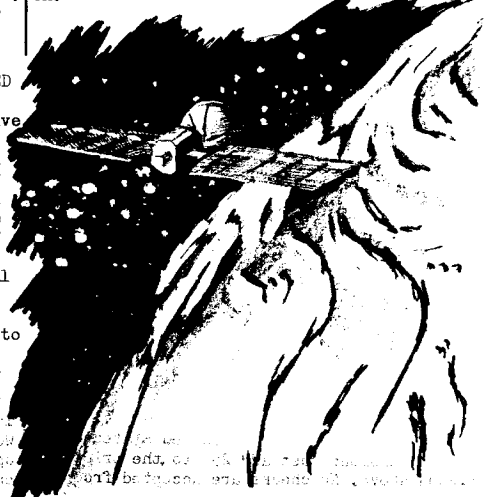
On June 13, 1983, the Region 2 Administrative Radio Conference, sponsored by the International Telecommunications Union, will begin five weeks of meetings over every aspect of direct broadcast satellites, both political and technical. For the past two years, the FCC had been meeting with the Department of State, the National Telecommunications and Information Administration, and the National Aeronautics and Space Administration to discuss the adoption of a set of proposals which the American delegation will present to the conference.

Published in the 4/28/83 Federal Register are the results of those meetings, found in pages 19212-19227. What does the United States hope for in the conference? Firstly, to obtain enough orbital slots and spectrum to provide about 70 channels per service area across the nation. Second, to provide

adequate spectrum for both the fixed-satellite and Broadcasting-satellite services. Third, to achieve sufficient flexibility in the adopted plan and procedures so that future U.S. requirements can be met with a minimum need for coordination with other countries. Fourth, to obtain enough flexibility within the plan to permit implementation of interim systems and systems of varying characteristics (in particular, the GBS plan to establish a high definition broadcast service, which will require a bandwidth of about three adjacent conventional television channels.) Fifth, to seek adoption of procedures that will permit modifications to the technical and operational characteristics of DBS systems subsequent to the formulation of the plan. Sixth, to maintain the focus of the conference on the technological aspects of the plan and procedures—avoiding extraneous political issues (as noted previously, the ITU has been getting more political oriented and less technological in recent years.) And seventh, to achieve the above objectives and yet still provide for the requirements of other governments represented in RARC-83.

What will the United States propose as far as technical proposals at the conference? The delegation will seek a minimum of eight orbital positions for four service areas that would accommodate about 72 channels per service area. 12.1-12.2 GHz will be proposed for fixed satellite services and 12.2-12.7 GHz for direct broadcast satellite. Circular polarization. Channel bandwidth of 24 MHz (which could be used as four adjacent channels for conventional television or one channel for high definition television).

There are many more technical proposals here which would take up too much space to explain, such as carrier/noise ratios, carrier/interference ratios, minimum elevation angle for receiving antennas, beamwidth, satellite antenna rotational error, and so on.



# FM NEWS Bruce F. Elving, Ph.D.

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Kearney NE 68847, U. S. A.

[Contributors' comments to be published next month!]

## New Stations

AR Russellville K282S 106.3 (KISR 93.7 Fort Smith AR translator-rock)  
CA Copperopolis 105.5 400 h.v.; 740'  
CA Quincy 101.9 1200 h.v.; 2560'  
FL Cocoa \*91.5 20000 h.v.; 100'; gospel  
IA Dubuque K252BA \*98.3 (KUNI 90.9 Cedar Falls IA translator; transmitter in WI) [110 watts]  
KS Coffeyville 92.1 3000 h.v.; 300'; k[country]  
KS Leoti 99.9 61000 h.v.; 395'  
MI Rogers City 97.7 3000 h.v.; 300'; Stereo; m  
MT Bozeman 95.1 100000 h.v.; 370'  
NE Cozad 104.5 100000 h.v.; 360'; Stereo  
NV Beatty K221BF 92.1 \$, b [KXTZ 94.1 Henderson NV translator]  
K224AQ 92.7 \$, k [KFTS 119.9 Las Vegas NV]  
NJ Parlin W220AA \*91.9 (WVFM 88.3 Hazlet NJ), \$ - Parlin is just east of Sayreville NJ.  
ND Devils Lake 103.5 100000 h.v.; 490'  
ND Minot \*89.9 100000 h.v.; 930'  
OR Redmond 107.5 100000 h.v.; 540'  
TX Mission 105.5 3000 h.v.; 300'; Spanish/Latin  
UT Tremonton 104.9 3000 h.v.; minus 110 feet

## Stereo

CA Blythe KERU \*88.5, Latin/Spanish  
CA Woodlake KUFV \*90.5, Latin/Spanish  
MD Emmitsburg WMTB \*89.9, "heard well in Gettysburg PA."

MI Warren WPHS \*89.1 (moving from 91.5, to make way for new 50-watter in Windsor on 91.5, with calls expected to be CJAM with a p-rock format)

MO Spolia KMNR \*89.7 progressive rock  
PA Gettysburg WZBT \*91.1 "heard 8-10 miles on GM car radio; north, betties it out with WMSS in Millertown PA, which takes over at Dillsburg on Route 15."

PA Lancaster WFNW \*89.1, "acid rock," heard well within seven miles on GM car radio.  
ON Cornwallville CFLG 104.5, "Stereo-104.5"  
MEXICO Mexicali XHBA \*104.1, c.l., some rock, totally noncommercially operated by college. Facilities thought to be less than 1968 feet above average terrain as I show them.

## No stereo

CA Carmel Bay KPLX 103.7 (and translator)  
CA Palm Springs KPLM 106.1 (big bands mostly)  
TX Kinneville KTAI \*91.1, rj, some c, now 100 w.

## Off air

PA York WVVC \*88.1 York College of PA, "not heard in several months," but applies for 90.7 with 100 watts.

## SCA (67 khz)

MI Detroit WWWW 106.7 TX, 24 hours  
WGPR 107.5 music, 24 hours  
NE Norfolk KNEN 94.7 TX  
NE McCook KZMC 105.3 TX (low-level tone)  
ON Kingston CFLY 98.3 music

## Multi-City Identifications (see also Facilities)

AL Troy WTSU \*89.9—adds Montgomery  
PA Starview WRHY 92.7 with York-Harrisburg  
SC Greenville WEPR \*90.1 now Greenville-Spartanburg, apparently no longer with Anderson

## Formats/Networks

AL Montgomery WLVI 92.3 RKO (from ABC-E), SCA apparently dropped (was TX)  
AZ Parker KMDX 99.3 k[country]  
CA Coachella KVIM 93.7 now English fulltime, m (no \$, no Spanish; lots of big bands)  
CA El Centro KXO-FM 107.5 beautiful  
CA Santa Barbara KDB-FM 93.7 now all c (not bc)  
GA Jackson WJGA-FM 92.1 back to rs (rock days), \$ symbol left off p. 74 new FM Atlas.  
GA Manchester WQCK 93.3 g (from k), 93-FM

KS Lawrence KJHK \*90.7 jp, \$  
MI Detroit WRIF 101.1 r (not rp; "no more rp on FM in Detroit.")  
MI Otsago WAOP 100.9 k, "One-hundred-one FM."  
MS Biloxi WQID 93.7 A (not Y), "94-QID"  
NE Kearney KRNY-FM 98.9 k (from rock)  
NV Boulder City KRRL 105.5 m  
NV Reno KNEV 95.5 b, not beautiful and classical  
OH Colina WKKI 94.3 m, K-94-FM  
OK Anadarko KRPT-FM 103.7 S (AP News, formerly called AP Audio news)  
OK Lawton KMGZ 95.3 rock, "Magic 95," on air.  
OK Pryor KMYZ-FM 104.5 k (was m)  
PA Easton WQQQ 99.9 now rock, Q-100 (strict)  
PA York-Lancaster WBSA-FM 103.3 rm (not rk)  
TN Memphis WEZI 105.9 k[country]; applies for new call letters; to be KX-106.  
WI Lancaster WAXL 97.7 k[country]

## Facilities

AR Booneville K232AV 94.3 (KISR 93.7 translator), add to frequency list, FM Atlas '83 p. 107 and to geographical list, page 70.  
AR Greenwood K269AL (KCFO 98.5 Tulsa OK—changing from carrying KLAZ 98.5 Little Rock)  
CA Arroyo Grande K292BK 106.3 (from K296BL 107.1)  
CA Hanford KKY5 107.5 16000 h.v.; 860'  
CA Santa Cruz K276B0 103.1 (from K292BK 106.3)  
CA Santa Maria K288CB 105.5 (from K232AJ 94.3)  
FL Homosassa Springs WXCV 95.3 adds Crystal River to its identification  
GA Marietta WKHX 101.5 890' (100000 horizontal)  
HI Honolulu KTUH \*90.3 100 w (Int. not announced)  
IL Emmett KMFE 101.7 890 h, 510' no vertical  
IL Springfield WFMB 104.5 43000 h.v. (430')  
IN Monticello WWET 95.3 1000 h.v. 520'  
IA Davenport KIKK 103.7 1190' (91000 h.v.)  
KS Concordia CKKS 95.3 2500 h.v. 230' [280]  
MS Hattiesburg WMSU \*88.5 (from 91.1) 3000 h.v.  
NV Henderson KMZQ 100.5 88000 h.v.; 1180'  
NM Ramah KTDB \*89.7 15000 h.v. 290', reduces coverage considerably  
NY Bath (from Hammondsport) WVIN-FM 98.3 2000 h.v.; 350' [91']  
NY Schenectady WRUC \*89.7 (from 90.9) 100 h.v./2  
OH Gambier WKCO \*91.9 270 h; 190'  
OH Morrow WLMH \*89.1 (from 88.1) 100 h.v.; 46'  
OK Norman KGOU \*106.3 300' (3000 h.v.)  
OR Klamath Falls KKRB 95.9 125' (3000 h.v.)  
PA Lancaster WPTG \*90.3 3000 h.v.; 170'  
TN Carthage WRKM-FM 102.3 1800 h.v.; 360'  
TN Lebanon WFMQ \*91.5 (from 91.3) 500 h (81')  
TX El Paso KEZB 93.9 61000 h.v.; 1205'  
TX Laredo KRRG 98.1 700' (86000 h.v.)  
TX San Angelo KWLW 93.9 650' (100000 h.v.)  
UT Smithfield KVEZ 103.9 adds Logan to its ID  
VA Chesapeake WFOS \*90.3 (from 90.5)  
WA Spokane KEZE-FM 105.7 100000 h.v.; 1910'  
WV Rayonover WRON-FM 97.7 450 h.v.; 800'  
PR Bayamon WXYX 100.7 690' (50000 h.v.)  
MEXICO Monterrey NL XHQI 102.1 303 meters (100,000 h.v.)

## Call Letters

AZ Payson 103.9 KPSN  
CA Paradise 92.7 KRJJ  
CA Shafter 97.7 KLYD"-FM" (KMGN)  
AR Pine Bluff 94.9 KADL (KADL-FM)  
CA Anaheim 95.9 KEZY"-FM" (KEZY-FM) [FM]  
FL Orlando 92.3 WWKA (apparently—from WDBO-)  
GA Fort Valley \*91.3 WHGW  
IN Franklin 95.9 WGAQ (WIFN)  
IN Rensselaer 97.7 WLQI (WJCK), m, "Lucky Radio"  
KS Liberal 107.5 KSCB-FM (KEZS)  
KS Pratt 93.1 KGLS (KWLS-FM), still k with TX  
MA Lynn 101.7 WFNX (WLYN-FM), bought by Boston weekly underground paper, "The Phoenix."

MI Ontonagon 98.3 WONT  
MO Branson 106.3 KRZK (KIRK"-FM")  
MO Nevada 97.7 KNMO"-FM"  
MT Cut Bank 102.7 KCTB"-FM"  
NY Bath \*103.1 WCJK  
NC Edenton 102.3 WZBO-FM (WZBO), Z-102  
OH Xenia 103.9 WYMJ-FM (WDJX)  
OK Broken Arrow \*90.5 KNVY  
OR Florence 92.7 K224AP (not K224AO, which is in Weed CA)  
OR Warm Springs 96.5 KHDE  
PA Pittsburgh 96.1 WHTX (WXKX)  
PA Schickville \*90.3 WXLV  
PA Wellsboro 104.5 WNB1-FM (WGCR)  
TN Nashville 105.9 WLAJ-FM (WJNY)  
VT Manchester 102.7 WEXX  
VT Waterbury 103.1 WWSB  
WA Deer Park 107.1 KNOI  
WI De Pere 95.9 WJLW

## Slogans/NonIDs

GA Newnan WRNG 96.7, Ring Radio, which has "Satellite Music Network" (was Mutual)  
IN South Bend WXMG 103.9 Magic 103.9 FM  
MI Battle Creek WKFR 103.3 no nonID  
NE Lincoln KFMQ 101.9 Q-102  
NY Gouverneur WIGS-FM 95.3 Wigs-  
NY Ogdensburg WPAO 92.7 Pac-93  
OK Broken Arrow KSNE 92.1 Sunny-92, simulcasts with KELI AM Tulsa  
OK Oklahoma City KJYO 102.7 KJ103 (strict)  
PA Blaisville WCOO 106.3 FM-106.3 stereo  
PA Philadelphia WWSH 106.1, c, Wish-106  
MI Detroit WCXJ-FM 92.3 Country-92  
WDRQ 93.1 93-FM (not FM-93)  
WABX 99.5 Musicradio  
WJZZ 105.9 Jazz-106  
NY Bristol Center WYLF 95.1 Life-95  
ON Kingston CFMK 96.3 K-96  
ON Windsor CJOH 97.7 The New Ohm FM ("good nonID for this station, because I find it easy to resist!")

## FM Atlas errors—Spotted by Nick Lombardi, Atlanta GA

Nick questions the usefulness of my decision to bring back secondary covers in the Atlas—especially for areas lacking flat terrain.  
p. 29—St. Marys GA is shown on map in FL; I should move the dot about 32 km north.  
p. 10—# 2 is the most conspicuous error in the whole book! After a well-reasoned discourse (95 of the Foreword) on why you decided to reinstate 50 microvolt secondary coverages, p. 10 gives equally convincing reasons for not including them.  
p. 12—explanation for the Dolby symbol should read, "This symbol appears between the mileage figures in part 1 of the station directory."  
p. 28 (GA map), \* missing from Conyers GA.  
p. 72 some missing between mileage figures for KSTN-FM 107.3 Stockton CA  
p. 74—some error for WREK 91.1 Atlanta GA  
p. 75—Next to Idaho you refer to "KMap."  
p. 80 call letters to BiloxiMS WMAA-H-FM missing.  
p. 84 Whiteville NC spelled as "Whiteville."  
p. 86 an extra "mc" above KCIV 104.5 The Dales OR.  
p. 87 Stereo and mileage figures for WMMR 93.3 Philadelphia PA badly out of alignment.  
p. 92 heading for WI looks like "Wisconsin"  
p. 112, Ga bainbridge, not Ga Bainbridge.  
p. 118, WCKN 101.1 should include a dual city ID, Anderson Greenville  
p. 120 102.5, CKUA-FM Hinton AL, listed as CKUA-FM—This is correct; it will be CKUA-FM with a number after, and we don't yet know the number.  
Other comments:  
The Key to Symbols, p. 12, looks very poor, with a terrible clash of font styles. Whatever the problem with your IBM Composers, I suggest you either get them repaired or junk them. The appearance of the Station Directory is not up to professional standards. See Vermont, p. 90.

# ANARC UPDATE

Steven Sprachman  
3939 Eve Drive  
Seaford, NY 11783

June 1983

ANARC and the WTFDA: Can ANARC help to improve our membership?

As WTFDA's representative to ANARC, this is one question I have given a great amount of thought to. Basically, ANARC is an umbrella organization dominated by shortwave radio enthusiasts. The largest clubs in ANARC are for this branch of DX'ing. WTFDA, on the other hand, is for a small unique section of the DX hobby. Few DX'ers can actually say they've tried DX'ing the VHF or UHF frequencies. Fewer can say they regularly DX these frequencies. Yet, I still believe that ANARC can help us. Not all active VHF/UHF DX'ers are members of our club. ANARC can help us to promote our club to entice these people to join.

First, a regular presence in ANARC's publications and functions is a must. I have been sending news about the WTFDA for the ANARC newsletter on a regular basis. Plus, we will be represented at this year's ANARC convention in Washington, D.C. A visible viability is important to our continued existence.

Second, we can look at the membership problems of other clubs in ANARC. We can study the solutions they have come up with to see if they were effective and if they could be applicable to our membership problems.

Finally, we can co-operate with the other membership clubs of ANARC. We may be able to arrange an exchange of promotional material. We could mention their club in the VUD if they mention our club in their bulletin. Members of WTFDA who are also members of other clubs can mention our club in the other club's bulletin, with an equal exchange in the VUD.

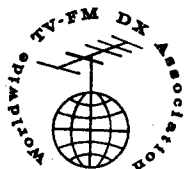
As an umbrella organization, ANARC makes it easier to talk to other clubs about problems we all have in common. This is a major reason why we must be actively represented in ANARC. ANARC can be and is a great help in the promotion of our club.

(I'd like to thank ANARC for promoting WTFDA on the May 8<sup>th</sup> SWL Digest on Radio Canada International.)

Until next time, may the weather, the DX, and my typing improve.....

S Sprachman

# MAKE YOUR CONVENTION PLANS NOW!



# ANTENNA NEWS

Doug Dornbos  
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Traverse City, MI  
49684

June 1983

Dear Fellow DX'ers,

Welcome to Antenna News. Last month's column was written as a separate essay, not being intended originally as part of a regular column, but never the less sufficed to open up communications between Dave Nieman and myself, and also gave me another month to prepare this and future articles.

There are a few things I would like to say in introduction of the "Antenna News." First, as always, your input is greatly encouraged. Drop me a line anytime. Secondly, this is educational communication, we will try to stay educated as to: what new products are available; what has been discontinued; new antenna designs; basic theory; practical hints; and what antenna literature, books, & articles are available. Again, if you have anything to say, please write. Thirdly, I will try to stay quite basic in my approach to theory for the advantage of those with little technical background. If you have a good handle on theory already, you might have to overlook some of the material presented. Let me know. Fourthly, an attempt will be made to provide you with avenues with which to buy equipment at discount. Several manufacturers and distributors have seemed quite willing to sell at wholesale or factory direct prices to me for distribution to you. More on this monthly. Fifthly, an introduction of myself. I have been a WTFDA member for 2 yrs., DX'ing only FM (90 stations logged) with a C/M Stereo Probe 9 @ 30 ft. running through a Winegard FM bandpass filter into an Advent 300 receiver (slightly modified). I have sold antennas both on the wholesale and retail level, and have attended the Winegard MATV (3-day) school in Burlington, IA and also the Channel Master TVRO (1 wk) school in Oxford, NC. I tell you these things not to pride myself, but to encourage you to write with technical problems for which I might have the books in which to hopefully look up the answers. Sixthly, lastly, but most importantly, I would like to say thank-you to Dave Nieman for his encouragement which has meant a great deal to me. Also, thank-you to you gentle readers & contributors, who, through your very act of reading and contributing, provide the stimulus for all this to take place. Thanks.

## MEMBERS' INPUT

I received a nice call from Andrew Jackson (Chicago) this week and we discussed the Finco sale to Sonim, and the availability of the Stereo 3 FM auto booster. It is available from Sonim. If you want one and can't find one locally, Sonim will sell them 12 @ a time for \$40. If we get enough people together, I'll order 'em. (\$40 each that is). Also we discussed the real purpose for a pre-amp, that is to establish the noise figure for the system and then to amplify the signal so that that noise figure will not be degraded. An article on pre-amps is forthcoming.

## READING

One of the natural antennas we all have is the eye. It receives frequencies in the light spectrum. If light is the signal, then reading is the tuning dial & books are the channels. Your local or state library is a loaded dial. Check it out. Listed below, for your reading pleasure, are all the pre-Hiroshima magazine articles on antennas that I could find reference to. If you know of others, let me know, and an addendum will be printed. Also, if you want to report on any of the articles or want to make any available for other members who might not have access to them, write and I'll print it in the VUD. I am most grateful to the Readers' Guide to Periodical Literature for much of this information.

TV Takes A Step Nearer Reality: AT&T's Coaxial Cable, News Week, Aug 3, 1935  
TV & The Coaxial Cable, Science News Letter, Nov 20, 1937  
Birds & Radio Aerials, Nature Magazine, Oct. 1938  
How To Install A TV Antenna, Popular Science, Sep. 1939  
Improved Dipole TV Antenna, Popular Mechanics, Jan. 1940

## Magazine Articles 1935-1945 (cont.)

TV Antennas-Indoor Device, Radio News, Feb. 1940  
 Rugged 50 ft. Telescoping Mast, Popular Mechanics, Apr. 1940  
 One Man Telescoping Antenna Mast, " " , Oct. 1941  
 Dipole FM Antenna System, " " , Apr. 1942  
 How To Construct A Dipole Essential To The Successful Operation of FM  
 Units, Radio News, Sep. 1942  
 How You'll Get TV, Science Digest, Jan. 1943  
 Indoor FM Antenna, Popular Mechanics, Aug. 1943  
 Mast Support For VHF & UHF Antennas Suitable For TV & FM, Radio News,  
 Antennas For TV Receivers, Radio News, May 1945 June 1944  
 Getting Ghosts Out Of TV, Science Digest, Aug. 1945

## ANTENNAS AND REFLECTORS - THEORY

Radio waves can be reflected. NO KIDDING! Most antenna manufacturers take advantage of this by putting a reflector element on their antennas. Reflectors change the directionality of an antenna, they allow very little reception in the direction of the reflector, and the signal that the antenna receives from the direction away from the reflector gets reflected back to the antenna and adds to it, making it much stronger. It will be easy to see now how other objects in the close vicinity of your antenna can affect reception. Your roof for example. It can reflect signals up to your antenna ie. allowing good reception from the direction of the sky, but poor reception from below the roof. As your antenna gets lower and lower to the roof the effects will be more and more dramatic, in fact, you will begin to pick up best at an angle not at all parallel to the earth, but at an angle up and away from the earth. This distance to the roof is not so much a matter of feet and inches but of wavelength. You can think of it this way: electrically, chan. 2 is much closer to the roof than channel 13. Using these ideas might prove helpful in DXing where picking up signals coming from the ionosphere might be more desirable than signals coming over the terrain, and also can be used to block out local channels. In a mobile home in which I once resided, I installed a high band yagi (10 element) about 1 foot off my roof. Local channels 7 & 9 did not come in at all. Raising the antenna 4 feet brought them in perfectly. I was not into DX'ing at the time so can offer no reports on using it for that. Because the spacing between the antenna and the roof affects signal strength and is frequency dependent, different heights do different things for different frequencies. For a permanent installation, much experimentation is recommended before bolting everything down tight. If you vary the height and see no improvement or degrading of the signal, don't be alarmed, maybe your roof is not very reflective, or maybe you are high enough above it to minimize it's affects. Generally speaking, without taking into account reflective effects, the signal picked up by the antenna will double as antenna height is doubled. At UHF frequencies this holds true only if you are in a clearing. Because UHF waves are so short, they can be reflected by much smaller objects than it takes to reflect a VHF wave, namely leaves and pine trees. UHF also suffers from whole areas being reflected out by some mammoth object (like a hill) to a much greater degree than VHF. With UHF, it becomes much more important to get away from trees than with VHF. For many woods-abiding nature lovers, UHF may remain a dismal proposition at best. In any case, UHF can have enormous differences in signal strength at points only a few feet apart. In trouble shooting a system recently employing the largest Channel Master Quantum UHF antenna, stations received was increased from 3 to 7 just by moving the antenna to the opposite end of the roof. Again, experiment before drilling those holes in the roof.

## ANTENNA MOUNTS

Deciding where to mount your antenna might not be a matter of choice at all, but may be dependant on what you have to work with. This month we will briefly discuss a multitude of antenna mounts. Next month we will discuss the lowly tripod, and in August, the tower. For now, all my examples will be from the Channel Master line as they have one of the

## Antenna Mounts (cont.)

more complete lines around and also of excellent quality. First of all, chimney mounts should be avoided, not as much as the plague but close. The reason being that while your chimney is exhausting it's waste, it is at the same time depositing them on your antenna, coating it and more importantly corroding it. Antenna life is shortened, contacts become unreliable, wire insulation can become cracked allowing water to get in, and preamplifiers can be destroyed. If the chimney is not being used of course, these things do not hold true. One advantage the chimney mount does have is that it is the easiest of all ways to mount an antenna on your house. Close to it is the vent mount. Roof vents are there for various reasons, usually to vent air to the plumbing system. The strength of the vent is the limiting factor here. I think I feel a poem coming on: A bent vent in a house you rent is not a good way for your money to be spent. Oh well, it to is an easy to install mount requiring no holes to be put into the roof and being quite inexpensive. Somewhat negating the no holes in the roof advantage however is the chance that the strain of the antenna could cause leaks around the vent. Guying would of course take care of that, but then we've got holes again. Eave mounts work well with houses having a 2" thick eave. No holes are required in the roof as the antenna mast is held just away from the roof. If a sturdy eave is not available, a wall mount does the same function but attaches to the wall (side) of the house instead of the eave. The advantage of the eave mount over the wall mount is that, do to the fact that the antenna acts as a lever, the eave mount being higher, has to deal with less force and therefore is a stronger installation. A very strong case could be made for using a combination of the eave mount with the wall mount. When using wall mounts, care should be taken to use no longer a mount than you need as this weakens the installation considerably. The heavy duty versions of wall mounts are definately worth their added cost. Now to the mounts that require guying and holes in the roof. Putting a hole in the roof of your new \$50,000 dream cottage is not a matter to be taken lightly. Leaks are a cause for great frustration and embarrassment not to mention loss of money. One simple guideline to preventing leaks is to tar your holes up like there's no tomorrow. Even tar your holes before you put your lag bolts in and then, when everything is done, mound tar up over all your well tightened bolts and around all cracks and crevices pertaining to the mount itself. This will also stop the rust which comes off all mounts in their later years from making such an ugly brown streak down your roof. The peak mount is ok, but provides no way for the antenna to be hinged down in case repairs are needed or experimenting is desired. The universal mount is much better in this respect and also can be mounted anywhere on the roof. It is slightly less strong, but I feel this is outweighed by the hinge advantage. The swivel base mounts are just cheaper versions of the universal mount and the savings are not worth the loss of strength. Guying on the roof must be weighed against using a tripod with no guys. Guys obviously provide a superior installation strength-wise but corrode quickly and are a genuine pain when it comes to shoveling snow off your roof. Personally I hate 'em and would do anything to avoid using them. To each his own I guess.

## NEXT MONTH

Post-war magazine article listings \* The great tripod debate \* Some tricks with mast pipe \* Current product news \* A report from the 1983 International Summer Consumer Electronics Show \* Antenna news from Israel

## A GRAMMER QUIZ

Because my grammer is often so poor, I offer you this quiz: What is grammatically more correct to say, that five and three IS nine, or that five and three ARE nine. Answer: Five and three IS nine.

That's all for now. Thanks for reading. See you in July.

# NORTHERN FM-DX

June 1983 NEW deadline...5th of month in my mailbox

Saul Chernos  
79 Ridge Drive  
Toronto ONTARIO  
M4T 1B6

PLEASE NOTE...All those (2 I believe) whose 88.1 French units I solved as Sault Ste. Marie ON, there is another FF on same frequency...CBAP-29 Charlottetown PEI, an easy PEI target for many of you, so try for it. My apologies to the above DXers, I'd thought the station to be CBC ENGLISH. I've since reviewed my lists and updated FM to include CRTC decisions up to the end of March. As I've said, send your Canadian units along with your loggings, and I'll try to solve so they can be included in your original report. Note, however, that mistakes are a constant hazard, and my policy from now on will be suggest you had a station, and NOT tell you. Take it in that light and judge it. The station explains FF on 88.1 for me during Maritimes skip last summer. Enuf, on with the rest...

Report to this column if you're from AK CT HA ID ME MA MT NE NH NJ NY ND OR PA RI SD VT WA WY CANADA and OTHER COUNTRIES. HQ deadline extended to 15th, so mine is to 5th.

Bruce F. Elving - 4515 Avenue "E" - KEARNEY NE 68847

There have been two occasions of skip—just before and just after winter. <sup>\*education</sup>  
Dec. 8, '82: I received WPM #88.5 Charleston WV at 0900 CST with full ID. <sup>10-848</sup>  
Mar. 6, 1983: Full IDs were heard from KUHF #88.7 Houston TX at 1259, XET-FM 94.1 in Monterrey NL (not 94.0 as in statistics column in April VUD) several times from 1300-1500, and KNFM 92.3 Midland TX at 1410 with new country music format. I actually heard all Monterrey stations via this skip but only one gave a full legal ID. They were the same ones I heard when in Monterrey last December. IHQQ 93.1 (93.2 in stats column) is off air. Also one MYSTERY station, XHFM 90.5 mentioning "mobile frequency, 25 miles potency and 5000 watts", translated. It wasn't XEDA-FM 90.5 Mexico City so I suspect new station, possibly in Saltillo.

OTHER DX - Nov. 28, 1982: The new KIDA 92.7 Ida Grove IA in \$; KNEY 95.3 Pierre SD with calls and "Y-95" non-ID, via AIRPLANE REFLECTION, and KILI #90.1 Porcupine SD with all-Indian programming and militant anti-US government speakers against conscription and Indian policies; carries rock music and long lists of song requestors, at night.

Dave Nieman - 12284 Nice Rd. - AKRON NY 14001

(I got 2 reports, so combined them-sc/ed).

Equip: Carver TX-11 & Pioneer TX-9100 tuners, \$ Probe 9 at 40 ft. most of the time.

Mar/83	10 Tr		
2 GW	1318 WRF	95.9 PA Lewistown, r*	175
1401 WCKZ 93.9 NY Norwich, nr*	13 Tr		
"Kicks-94-\$"	0103 CBON-17	95.1 ON North Bay, FF	235
4 Tr		s-off in WLF null	
0839 WJRX 100.1 NJ Manahawkin, r*	13 GW		
9 Tr	0928 WEOZ	94.3 PA Saegertown, r*	120
0110 CBGA 98.7 ON Owen Sound, c 165		"Z-94" ex-WTSS	
s-off	17 Tr		
9 GW	1236 WORW	91.9 MI Port Huron, r*	200
1102 CBBP 103.9 ON Peterborough, c* 85		(* ID on tape)	
testing, \$			

Mar	11 Tr		
22 Tr	2258 WCBS	101.1 NY New York, r*	275
1018 WFLS 93.3 VA Fredericksburg, k* 335		"CBS-FM-101"	
Apr	13 GW		
5 Tr	1030 WBEK	93.3 NY Brockport, r*	35
0203 WYEP 91.3 PA Pittsburgh, j* 180		(from 90.5)	
(from 91.5 comments below)			
9 Tr			
1007 WKBI 94.3 PA St. Marys, r*			115

WYEP has finally changed freq, but it seems as if they went a little too far. They were logged at approximately 91.07 MHz. Being their first night on the freq. (so to speak) & at higher power, they were asking for phone calls from anywhere they're being heard. To make a long story short, I phoned & asked what freq. they were supposed to be on. He said 91.3, I tried to tell him they weren't, but he didn't understand. He just asked what I'd like to hear, & thanked me for calling. They were still around 91.07 the next night, and I haven't heard them since.

-Dave.

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

(April 18, 1983)

Last month I purchased a deluxe indoor FM antenna, so named, from my local Radio Shack. Being from Radio Shack, I didn't expect too much, but as it turns out, it out-performs the built-in whip on my Zenith Trans-Oceanic and until now, I've been unable to find anything that would do this. I've tried a 2 thru 6 TV yagi with AMP, and without AMP, indoors on FM and received nothing but overload. I've also tried TV rabbit ears but they didn't improve reception over the whip. With this gadget I'm able to hear listenable signals from WHGU 97.3 & WQNY 103.7 Ithaca NY and WKXZ 93.9 Norwich NY, all at around 80 miles to the north from downtown here. The mountains totally block all NJ stations out to the East of here, as well as NYC locals. It's quite a different story in the Pocono Mountains, where I DX from time to time, also. Locally, not much changed on the FM band. WMJW 92.1, WKRZ 98.5, WGBI 101.3, WWDL 104.9 and WHIM 106.5 are still Top 40. WYZZ 92.9 is still MOR and WEKZ is Album Rock. While in the Poconos at Thornhurst where I've an outdoor antenna at my parent's home, I listened to the new WIF1 92.5 for a few minutes, and that's all I could take of the punk-new wave or whatever they call it. WIF1 non-IDs as "I-92" as opposed to the former "Wy-F1". In DX, only...

APRIL

7 Tr  
2110 WVOR 100.5 NY Rochester  
10 Airplane Scatter  
1314 CIGL 97.1 ON Belleville  
up loud for ID, EZL music

13 Tr

1700 WOKW 99.9 NY Cortland,  
16 Tr  
1312 WVOR 100.5 NY Rochester

"OK-100" ex-WNOZ, T-40 mx

KGRC © 92.9

I can hardly wait to try Es on this new antenna; it should work well. I might add, it also pulls in meteor bursts well for an indoor antenna. I've heard several, so far. I will venture a prediction that this year will be a good year for E Skip, on the par of 1977, but not quite 1975 or 1976.

Saul Chernos - finally out of Ottawa for the year

Harry, I wish you luck with your new set-up. I also had a Zenith T.O. and had the same woes as you. It was OK hooked to outdoor antenna for Tropo, but I've always preferred my Sony "woodbox" TFM-1102 for Es. I've now got a system to hook the Sony to the antenna; I can hardly wait to try the Tr on it this summer, as it's quite the selective machine, despite the fact that it predates Gaglielmo. The TFM's rabbit ears were nice on Es but not as good on Tropo.

A new political unit? Only in Canada... The NWT may divide in two, one being Nunavut. It would be in the treeless N.E. of the NWT. The name of the other half has not been mentioned. Nunavut is home to 16,000 Canadians, mostly of Inuit origin. This is only a proposal, but I think it'll pass. Perhaps a year or two. Any members up there please report to NORTHERN. (Bill Hepburn would you be in Nunavut?). Inuktitut would be the official language.

Also, Harry Hayes, re WIF1, it may be Mod...yes, mod. Buy an album by the English Beat, early Who, the Jam. It's the way of life in Britain, and has a cult-like following. According to a friend who likes Mod music, it is nothing like punk. In fact, Mods hate punks, & vice-versa. If the music catches on in North America, some stations may go mod, as some did for disco. I've never heard WIF1, so not sure just what they are-progressive.

Did some DX on way home from Ottawa. Ottawa is in the basement of a valley, so I don't DX in it. But as you go towards Cornwall ON, it gets better. On outskirts, I had: 100.7 CBP-FM Montreal PQ, 101.5 CHIP in Fort Coulonge PQ. CHIP is English & French. I also had WSLU 96.7 Canton NY, & lots of locals. This on April 13th. I passed thru Brockville ON & no trace of locals 100.3 CBOP, 103.7 CHXL and 104.9 CBRA. In Belleville, no 94.3 CBBB. In other words, they're not on air yet. 103.9 CBBP, heard testing in \$ by Dave Nieman is on with programming, // CBL-FM Toronto. Gets a good signal into Toronto & E. ON, so could hurt in Burnt River. 88.1 CKLN Toronto, pj format could be on in June with a hefty 14 watts. Cobourg CFMX is financially troubled but still on the air. This DX of sorts was on car radio, so no real results of course. I hear were getting together in Dunkirk. I'll be there UNLESS I have to do a rewrite of an exam - a real possibility. If I go, I'll bring my Canadian lists, TV Guides from Ontario, and some CRTC\*DOC publications. Also other DX info & trivia items. So, until next month...73s & send a contrib!



WFID-FM, P.O. BOX 20079  
RIO PIEDRAS, P.R. 00928





# SOUTHERN FM DX

Danny Buntin, editor  
1312 N. Skyline  
Stillwater, OK 74074  
DEADLINE: 10th

JUNE 1983

## NEW SEASON SHAPING UP SLOWLY

### NOTE NEW, LATER DEADLINE

Jim Pizzi, P. O. Box 1778, Lovington, NM 88260 - 3/5 to 3/6 MST (805) 396-3432

Equip: JVC VT-700, VT-900 & Akai

3/5 Es	3/6 Es
1836 XHFS 93.3 Veracruz, ads, talk 1032	1055 WDEN 105.3 GA Macon, ads, 1148
1844 XHTS 102.9 Veracruz, latin mx	"FM-104 Macon"
1846 XHVE 102.1 Veracruz, tent. r mx	1059 WEZK 97.5 TN Knoxville, EL 1125
1851 XHPR 101.3 Veracruz, Latin mx, Vera. men.	1101 WSIX 97.9 TN Nashville, ads
	1103 WTFM 98.5 TN Kingsport, ID 1197
	1108 WDOD 96.5 TN Chattanooga, calls + 1035
	"Magic-96 FM"
0957 WWBA 107.3 FL Tampa, calls 1300	1110 WSKZ 106.5 TN Chattanooga, "KZ-106" "
1000 WPAP 92.5 FL Panama, ID 1071	1120 WIVK 107.7 TN Knoxville, ID 1125
1001 WR?L 98.5 FL??	1125 WJYN 105.9 TN Nashville, ads 968
1005 WOSM 103.1 MS Ocean Springs, calls 895	1127 unID 107.5 ? ant. ENE "Y-107"
1009 WVOG 102.9 GA Columbus, ads 1067	1128 WDYN 89.7 TN Chattanooga, g. ID 1035
1024 WLTA 99.7 GA Atlanta, calls 1098	1129 WBKY 91.3 KY Lexington, ID 1103
1025 WVNA 100.3 AL Tuscumbia, ads 900	1130 WUEV 91.5 IN Evansville, ID 950
1028 WQHL 98.1 FL Live Oak, EL 1220	1135 WBKR 92.5 KY Owensboro, k 968
1037 WBGY 93.3 TN Tullahoma, ads @1050	1136 WKQQ 98.1 KY Lexington, "double q" 1103
"Boogie 96" 990	1159 WLBH 96.9 IL Mattoon, ID 932
1038 WQLS 100.7 TN Cleveland, r, ID, 1058	1202 WLHN 97.9 IN Anderson, local news 1080
"Q-101"	1204 WINT 102.1 OH Lima, tent., k, "T-102"
1040 WHMA 100.5 AL Anniston, promo ID 1013	1210 WDNL 102.1 IL Danville, calls, r
1044 WKLS 96.1 GA Atlanta, r @1047 "96-rock"	1230 WT?? 91.1 N. E.
1051 WZYF 104.3 AL Athens, ID 945	
1053 WRVR 104.5 TN Memphis, ID 784	

April 1st brought some high winds--80 mph, taking down my 20' push-up mast w/10 element vert. FM on it and destroying the antenna and mast. Looking for a replacement now. As of 4-6 still snowy and cold here, looking forward to warmer wx. March Es a nice surprise, especially from Mexico, my first FM Es from there. Til next report, 73's, best of DX, Jim.

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

Equip: Pioneer TX-9100 tuner, Antennacraft GF-10 30' high with rotor.

5/6 Es	5/6 Es
1523 WQHL 98.1 FL Live Oak, ID, k	1600 WNJY 94.3 FL Riviera Beach-W. Palm Beach ID
1532 WWLY 94.5 FL Daytona Beach, ID, 1230	1600 WHLG 102.3 FL Jensen Beach, ID
"Love 95", financial report	1604 WQYK 99.5 FL St. Petersburg, ID
1535 WNFQ 94.3 FL Lake City, ad, "94Q"	1607 WCKD 98.3 FL Arkadia
1539 WCSN 94.9 FL Tallahassee, ID, k	1609 WAIA 97.3 FL Miami, ad "97A1A" 1230
1543 WHOO 96.5 FL Orlando, ID, who-FM 1070	1612 WSCR 95.3 FL Ft. Myers, ID, g
1537 WYNF 94.9 FL Tampa - St. Petersburg, ID	1614 WCVU 94.5 FL Naples, b, ID, "Seaview"
1555 WIZD 98.7 FL Ft. Pierce, "99-IZD"	1635 WWUS 104.7 FL Big Pine Key, r, ad,
1557 WWBA 107.3 FL St. Petersburg, ID 1040	"US-1", formerly on 93.5

Report your FM DX to this column if you're from: AL, AR, AZ, CA, CO, DC, DE, FL, GA, KS, KY, LA, MD, MS, NC, NM, NV, OK, SC, TN, TX, UT, VA & WV. Happy DXing this summer!

KODA 99FM

GROUP W  
4810 SAN FELIPE ROAD □ HOUSTON TEXAS 77068

WRNO  
fm & worldwide

4539 I-10 SERVICE RD., METAIRIE, LOUISIANA 70002  
TELEPHONE (504) 888-8484

# WTFDA 1983 CONVENTION REGISTRATION FORM

-----  
Please complete and mail  
as soon as possible and  
not later than July 23!  
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Please include a  
SASE for confir-  
mation reply.

MAIL  
TO:

Bob Seybold  
Bennett Road, RD 2  
Dunkirk, NY 14048  
-----

Please reserve a motel room for me for the following dates:

July\_\_\_\_,\_\_\_\_,\_\_\_\_, August\_\_\_\_,\_\_\_\_,\_\_\_\_. I would be interested in  
sharing a room with one or more DXers: ( ) Yes ( ) No. If yes, do you  
have a choice of roommate(s)? \_\_\_\_\_

( ) Enclosed is \$20 advance registration fee.

( ) Will pay at convention.

(Registration fee includes banquet, refreshments, convention expenses.)

If you can provide transportation for other DXers in your area, or along  
the way (splitting gas expenses), please explain \_\_\_\_\_  
\_\_\_\_\_

If you need transportation and would be interested in riding with another  
DXer in your area or along the way (splitting gas expenses), please  
explain \_\_\_\_\_  
\_\_\_\_\_

What day and time do you plan to arrive? \_\_\_\_\_

If arriving by air or bus, please give details (line, number, time, etc.)  
\_\_\_\_\_

If you plan to bring any of the following, please check: ( ) DX cassette

( ) DX reel-to-reel ( ) videocassette \_\_\_\_\_ format ( ) DX movie

( ) slides

Name: \_\_\_\_\_

Number of persons to  
be included in this  
reservation \_\_\_\_\_.

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip/PC \_\_\_\_\_

I am primarily interested in: ( ) TV, ( ) FM, ( ) PSB

I would be interested in conducting a seminar: ( ) Yes ( ) No. If yes,  
explain: \_\_\_\_\_  
\_\_\_\_\_

I am interested in going on station tours: ( ) Yes ( ) No

# QSL CORNER

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

TV-QSL

- BC CHBC 2 Kelowa, 342 Leon Ave., Canada V1Y 6J2. Typed letter from T. E. Wyatt, CE Jefferson
- ON CKVR 3 Barrie, Box 519, Canada L4M 4T9. Letter from Rod Reid, Dir. of Eng., also send bumper-stickers... reply in 3 weeks. Ross
- CKCO3 42 Oil Springs, 864 King St. Kitchner, Ont. N2G 1E8. Station send my prepared card, letter & station data sheet. Signer none. Reply in 7 days. Ross
- CBET 9 Windsor, Box 9, Detroit, MI 48226. Filled in info on my own personal ham card which I send as a souvenir. Reply in after 5 ½ years. Signer was R. Keys. (see note below) After followup reports Ross
- CFTO 9 Toronto. Send photograph of CN Tower, with station data on back, signed by P. Edgley, Mgr. Reply in 5 years after follow-up Ross
- IA KCCI 8 Des Moines, 9th at Pleasant St, P. O. Box 10305, 50306. Letter, program schedule & business card from Bill Huey, CE in 5 days. Purdue
- IN WLFI 18 Lafayette, Box 7018, 47903. Personal letter & contour map in 14 days from Ken Gardner, CE. Ross
- WTTV 4 Indianapolis, 3490 Bluff Rd. Red/white QSL card with full data of station & qsl note, signed by Paul Bohrer, CE in 3 ½ years. Ross
- WMBD 31 Peoria, 3131 N. University, 61604. Personal letter from Walt Konetco, jr. CE that invites dx reports, reply in 3 ½ years. Ross
- WPTA 21 Ft. Wayne, 3401 Butler Rd. 46808. Personal letter from Douglas Dewey, Eng. send station data sheet & map in 2 ½ years. Ross
- KS KARD 3 Wichita, 833 N. Main St, 67201. Personal letter & white qsl card from Donal Hain, Dir. of Eng. Station now is KSNW-TV. Reply in 3 ½ years. Ross
- KY WKPC 15 Louisville, Box 37380, 40233. Personal letter & actual station log for my reception in 14 days from Charles T. Landers, CE. Ross
- MI WFUM 28 Flint, Univ. of Michigan, 48503. Letter from Guy Beverlin, CE states that they only have translator on ch. 28, but I saw them 100% clear on ch. 18. He also stated that dx'ers have been report reception of WFUM on ch.s 18, 28, 36, & 59. Possible harmonics?? Reply in 14 days. Ross
- MA WGBH 2 Boston, 125 Western Ave, 02134. Personal letter from Dave St. Onge, CE in 8 ½ months after follow-up. He stated that my report was first from Canada. Ross
- MD WNUV 54 Baltimore, 3001 Druid Park Dr. 21215. Nice letter & coverage-map & program guide. Reply in 1 month. Holbrook
- OH WXIX 19 Cincinnati, 10490 Taconic Terr. 45215. Personal letter with station data, in 17 days from James D. Parker, CE. Ross
- WTLW 44 Lima, 1844 Baty Rd, 45807. Letter from John Marshall, CE stating that my letter was farrest reception report yet! Reply in 25 days. Ross
- WCET 48 Cincinnati, 1223 Central Pkwy, 45214. Letter from Ed Middleton, CE in 24 days, with full data. Ross
- WLIO 35 Lima, box 1689, 45805. Black & white card qsl, signed by Maurie Lamb, CE in 3 ½ years, after follow-up. Ross
- W58AM 58 Kent, 1640 Franklin Ave, 44240. Translator of WNEO-45 at Kent, OH. Send back my ham card with qsl info on it, unsigned in 25 days. Ross
- PA WPCB 40 Pittsburgh, Box 17220, 15235. Full data letter from Jerry Foreman, Dir. of Eng. in 25 days. Ross
- WTAJ 10 Altoona, P. O. Box 10, 16603-0010. Card signed by Dick Kline, CE in 3 weeks. Ross
- WJAC 6 Johnstown, P. O. Box 38, 15907. Letter from Art Vrooman, CE in 3 weeks. Ross
- WI WITI 6 Milwaukee, 9001 N. G. Bay Rd, 53217. Letter from Don Roering, CE in 3 ½ years after follow-up. Ross
- WPNE 38 Madison, 732 N. Midvale Blvd., 53705. Send his personal business card, & return my letter with qsl note. Signed by William C. Woods, CE in 25 days. With full data qsl note on my report letter. Ross

This TV QSL month reports are: Robert Ross of London, Ont; Hank Holbrook of Chevy Chase, MD; & Ronald Purdue of Byron, MN. A note from Robert Ross, VE3JFC says: "In late Feb 83 I sent out about 60 follow-up reception reports to tv stations. I have seen in the last 5 years but received no qsl from. These follow-ups proved quite worthwhile. Managed to verify 3 new states, thanks to follow-ups: Hope some more trickle in before next month. All qsls received back in 30 days." This is a good point that Robert Ross has brought up. How many dx'ers bother with sending out that second report of your first logging as a follow-up report to get some station to verify your reception. I hope my readers do this with their reports. 73's for now, and hope you keep on reporting your reception for qsls to be used in this QSL Corner Column. till next month, & see you at the convention.

Tom

Mike Reid  
109 Arjay Cres.  
North York, Ont. M2L 1G6  
CANADA

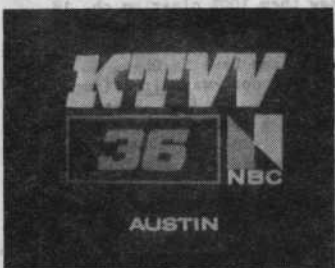
This month, tropes as seen in MI and NM and skip from seasons past in MI.



WENY-36 Elmira, NY Sept. 9/82  
320 mile tr (OP)



K16AB-16 Guymon, OK  
273 mile tr (JP)



KTVV-36 Austin, TX  
377 mi. tr (JP)



CJBRT-3 Rimouski, PQ  
815 mi. Es from '82 (OP)



Good ol' WEDU-3 Tampa, FL  
Es May 28/81 (RG)

### The gang:

(OP) Paul Gaines, Detroit  
(RG) Robert Grant, Detroit  
(JP) Jim Pizzi, Lovington, NM

The above photo of CJBRT should clear up any disputes about its calls. Even CBC lists get it wrong! (But knowing CBC lists like I do...)

73's  
Mike

# WESTERN TV-DX

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

June 1983

Deadline: 7-8-83

A dismal month for DX, although things are picking up. A total lack of recent reports indicates conditions are the same elsewhere.

Nathaniel Ely wrote to say that there has been no DX, and that he continues to have trouble with radiation from his local CATV operator. Nate also questioned my moving his loggings from one state to another; i.e., WKY-32 to Indiana and WFIE-14 to Kentucky. For any DX'ers who are unaware, when the state of location is in parentheses, it indicates a transmitter location which is different from the state in which the city of license is located. I have been following the practice of logging TV stations by transmitter location for so long that I was carrying the practice over to the column almost without thinking. In the future, I will leave it up to the reporter whether he wants to report his loggings by city of license location or transmitter location; although I will expect it to be consistent.

Please note that the reporting deadline will generally be a little later each month from now on due to a change in deadline at headquarters. Because of my schedule, however, I will have to continue to put deadlines on Fridays which will give me sufficient time to do a column on Saturday and still get it to headquarters on time.

New \_\_\_\_\_ New Mode \_\_\_\_\_ Tentative - t Unidentified - unid

Jim Pizzi, P.O. Box 1778, Lovington, NM 88260 (505)-396-3432

MST

### March 1983

6 Es 0922 WESH 2 FL 1346	6 Es 1558 KUSD 2 SD 761	KTBC- 7 instead of
0929 WUFT 5 FL 1274	1644 CKTV 2 SK 1188	K72DU Brownwood with
0930 WEAR 3 FL 950	14 Es 1900-1945 unid 2 Mex	KTXS-12)
1029 WJBF 6 GA 1238	15 LS 1514 KAUT 43 OK	0234 K6TEL 67 TX 289
1030 WCTV 6 GA 1148	1517 KOKH 25 OK	(Mullen-WGN via sat.)
1032 WMAB 2 MS 828	Unid's ID'd by Bill Fabher:	0050 K74?? 74
1105 Unid channel 7	(Black singers, ene,	(Bill thought this
(Black singers, ene,	TN, SC, VA??)	might be K74BF in
1106 Unid ch 6 ene	December 1982	Canadian, TX, but
1518 WCCO 4 MN 968	1 tr 0044 K63AY 63 TX 289	the direction is
	(Mullen - fed by	wrong. Definitely an
	K72DW Mason, TX with	Austin heading, not
		Amarillo.)

A slim report this time of the year - still cold and snowy here (April 4, 5). A nice Es opening, though, which brought memories of warmer times. Spring weather can't be too far off.

On April 1, we had a wind storm - 80 mph. It took down my 20' push-up mast because of too much antenna. Ten element channel 5 / ten element channel 2 / ten element channel 7-13 / and vertical 10 element FM. No damage to channel 5 or 7-13 antennas, some to channel 2 antenna, but FM destroyed. I'll replace it soon.

Many thanks to Bill Fabher on my unid's. It seems that WGN-9 is becoming popular with translators (direct from Satcom FIIIR). I've seen several already - if I had a list, it wouldn't be so bad. Well that's it for now. 73's. Best of DX, Jim

Fred McCormack, 135 Prairiewood Drive, Fargo, ND 58103

CST/CDT

### April 1983

4 tr 2127 K56## 56 MN 125	(Appleton WTCN-11)
29 tr 0935 K34AF 34 MN 90	(Alexandria SPN)

### May 1983

2 Es 2100 unid 2 s NBC	2 Es 2150 unid 5 w ABC
2132 unid 3 s PES	(MUF 92.5@2152 brief)
2144 CFAC 2 AT 840	2159 (BCTV) 3 BC ?
	5 Es 2103 unid 2 s NBC brf

K34AF is a new LPTV at Alexandria relaying SPN via satellite. No local ID's have been seen yet. This is the fourth LPTV in my log book.

It's nice to see bits of Es returning. Hopefully, it will be common by the time this is read.

My logging of BCTV on May 2 goes into the book as a new logging even though it is impossible for me to identify with certainty which transmitter I actually saw. This follows my practice of counting Es reception from one of a multitude of identical television repeaters as being from a single station. This makes it possible to list what is certainly a new logging, but unfortunately, also makes it necessary to count any addi-

Fred McCormack (continued)

tional loggings as relogs, even though they may be from different sites. For anyone who is unfamiliar with BCTV, it stands for British Columbia Television and is used by CHAN-8, Vancouver, and I believe, also by CHEK-6, Victoria which is co-owned. In turn these two station's signals are repeated by over 100 transmitters. So you can imagine the identification problem for Es loggings. These stations do have call letters, but I haven't seen any ID other than BCTV used in recent years. Does anyone know if they ever use call letters? Incidentally this station is also relayed by ANIK satellite in a scrambled format.

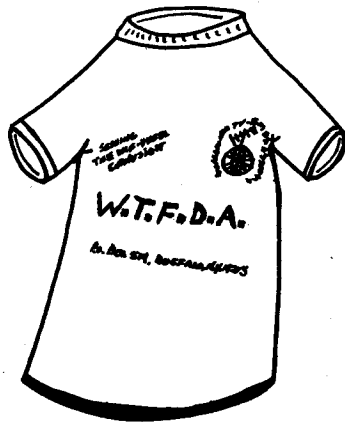
Fred McCormack, Des Lacs, ND 58103

CST

I got a chance to check out conditions at my Des Lacs DX QTH one weekend in April. I went out to repair my antenna installation which was damaged during an ice storm in March. I got the FM and VHF antennas back up, but unfortunately was unable to reinstall the UHF antenna. However, there is an old Archer 4 bay antenna fix mounted for the northern path to CBKFT9-26 at Bellegarde, SA. On April 21 at 2247 I logged, new on the air, CBWFT12-32 from Oak Lake, MB at 110 miles. This transmitter relays CBWFT10-21 at Brandon.

Also noted the weekend of the 21st was a large amount of auroral hash; at times into the high band, but no TV ID's. As usual, results on the FM dial were better. I hope to get a long weekend out there during June, and see a little Es.

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NY 14205

# EASTERN TV·DX

William J. Draeb  
Ellis St. R.R.#2  
Kewaunee, WI  
54216

June 1983

Deadline: 1st

Robert Grant; KD8EN, 5775 Bishop, Detroit, MI 48224 EST

Jan. 1983	Feb. 1983	Feb. 1983
5 Es 1550 CBWFT-3 MB t	14 Tr 0255 WTHI-10 IN	14 Tr 0300 WHAS-11 KY
9 Au hash on all channels.	Terre Haute	GW 0930 CICO33-33 ON
21 Tr 1010 WFSL-47 MI	0105 WENS-10 OH	
Lansing	Columbus	April 1983
	0200 WCPO-9 OH	13 AS(Airplane Scatter)
	0214 CKGN22-22 ON	1531 WPSX-3 PA
	0230 WISH-8 IN	State College
	0235 WTVW-7 IN	
Feb. 1983		
14 Tr 0000 WFYI-20 IN		
Indianapolis		
(WXON off)		
0028 WNIN-9 IN		
Evansville		
(CBET off)		

nal, 2 a signal legible by a DXer, 3 a watchable/listenable signal but with very slight snow, hiss, flutter, cci lines or confetti (chroma snow), a 4 is snowfree and 5 is full quieting (bright whites on video). The local TV dial looks like this: 2-WJEK 55434, 3-WKYC 12232, 4-WDIV 55555, 5-WEWS 12311, 5-WNEM 11111, 6-WJIM 20200 (zeros are wiped out by CJOM-FM), 7-WXYZ 44454, 8-WJKW 12411(35523 summer), 9-CBET 45554 (45533 summer), 11-WTOL 22333, 12-WICU 11111, 13-WSPD 21111, 13-CKCO 11111, 20-WXON 45354, 24-WHDH 11111, 28-WFUM 22341, 29-CKGN29 11331, 30-WGTE-23433, 31-WIHT 11111, 32-CKCO32 35344, 42-CKCO3 23353, 48-CBLFT3 10120, WKBD 44253, 54-CBET 33354, 56-WTVS 22152, 59-CICO59 11111, 61-WCLQ 11111, 62-WGPR 45454, 68-CBLFT9 10140.

As of April 1, ON-TV is now off TV. WXON is now a free independent. ON's failure is blamed mainly on the popularity of HBO carried on an MOS system. WXON and WKBD (even WDIV) are at "movie war" trying to get the highest ratings. (WKBD is currently the highest rated UHF independent in the USA.)

I'm seeing a new kind of DX problem in the form of today's "new wave" commercials. The ads use surreal (hypersaturated) colors. During normal programming the color subcarrier of WJEK-2 shows up on ch.3 as minor gray spots. When 2 has these "new wave" ads the color subcarrier is about 20 db stronger and ch.3 is wiped out. And often WJEK will run these ads (as will any station) while the DX station is IDing! What next?"

Steve Sprachman; 3939 Eve Drive, Seaford, NY 11783

Well, another month of little DX activity is almost over. New York's monsoon weather has not helped. We've gotten over 13 inches of rain this April, as compared to an average of 3 inches for April. And the rain almost always fell on one of the two days of the weekend.

April did include a trip to the Chicago area - Naperville, IL to be exact, for a Bar Mitzvah (a Jewish celebration of the coming of manhood at the age of 13) I did get a chance to do some DXing. From the hotel TV (which was not connected to an outside uhf antenna), the Rockford, IL and Madison, WI U's were seen on Friday, 4/22/83. There are 3 STV stations in Chicago. WSNS-44 is STV most of the time. WFBN-66 had some non-scrambled programming on Sunday morning. WPWR-60 was the best of the three. It had non-scrambled programming during it's whole broadcast day - 7:00 A.M. to 7:00 P.M. The programs consist of "George of the Jungle" cartoons, the "Flying Nun" and FNN. The evening programs were scrambled. According to the TV Guide, WCIU-26 also has stock market programs on weekday afternoons. I wonder if these programs are done locally or is there a program that competes with FNN?

My ch.59 mystery is back. After not being seen for over 2 months, the station was on again on April 26 and 27 with a test pattern with "59" in the middle. Still, no I.D.'s on the hour and 1/2 hour. And no call letters on the t.p. Enclosed is a copy of the test pattern. (Color bars with white 59 in middle-wd). Has anyone else seen my 59 mystery? Anybody knows what it is? (Suggestion: Send a copy of it to Rober Grant for his column.-wd). If it's WTVU-59, New Haven, CT, when are they coming on the air?

Eastern TV-DX

Sprachman; continued---

June 1983

The ANARC convention is coming soon. It is a worthwhile event for any DXer. I hope to see many of the WFFDA members there in Washington, DC. I'm sure it still won't be too late for many members to come to the convention (as long as you don't read this after July 15th.) The WFFDA will be well represented at the convention.

I'll be off to Europe in May; Vermont for the 4th of July weekend; Washington DC from July 15-17, and to matrimony on Oct. 30. I hope to have some information after each trip that I will share in my reports. (As long as you're running all over the country, why don't you try and solve that ch.59 mystery?--wd) I hope the DX picks up and that everyone is planning a good summer.

That's it for now. And still no solution to my "59 mystery". P.S.--The honeymoon plans are to Spain. I hope I don't get airsick. (As long as you don't get bed sick. hil--wd)

Saul Chernos; 79 Ridge Drive, Toronto, ON M4T 1B6 EST-EDT?

All DX from Burnt River, ON.

June 1982

14 Es 0028 KJRH-2 OK 1100
15 Es 1924 WBRZ-2 LA 1230
1930 WCHI-4 MS 960
1931 KPRC-2 TX 1410
1932 KMOL-4 TX 1545
1933 WLBT-3 MS 1085
1934 KOTA-3 SD 1240
2100 KTVC-6 KS
2228 KWGN-2 CO 1405
2230 KNOP-2 NE 1165
2241 KOA-4 CO 1405
2250 KYCU-5 WY 1370
2300 KRMA-6 CO 1405
2325 KDUH-4 NE
2359 KTWO-2 WY 1420
17 Es 1928 WFBT-2 FL 1340
1930 WEDU-3 FL 1215
2300 KJRH-2 OK 1100
2310 KAMR-4 TX 1415
2318 KTVY-4 OK 1205
2319 KDIX-2 ND 1200
2330 KARK-4 AR 1020
18 Es 0000 KCKT-2 KS 1150
0128 KPRY-4 SD 1095
0200 KYCU-5 WY 1370
0201 KTVS-3 CO 1305
0229 KDUH-4 NE
19 Es 1929 WESH-2 FL 1110
1930 WFWJ-4 FL 1345
1943 WBRZ-2 LA 1230
20 Es 2020 KWGN-2 CO 1405
2029 KPCA-2 MN 725
2031 KOA-4 CO 1405
2214 CBKMT-4 SA 1355
2217 CKTV-2 SA 1315
21 Es 1930 KTVY-4 OK 1205
2030 KETS-2 AR 1020
2100 KJRH-2 OK 1100
23 Es (Aurorally induced)
0330 KOTA-3 SD 1240
1713 WCSH-6 ME 430

June 1982

25 Es 1632 WDIQ-2 AL
1647 WFWJ-4 AL 1025
26 Es 1100 WDSU-6 LA 1225
1500 KDUH-4 NE
27 Tr 1730 KTWO-2 WY 1420
1730 WWUP-10 MI 315
WGTQ-8 MI
30 Es 1902 WESH-2 FL 1110
July 1982
2 Es 1735 WESH-2 FL 1110
1750 ICR-2 Cuba
1800 WFBT-2 FL 1340
1815 unids; see notes
1900 WCBZ-2 SC 850
WCVI-4 SC
1930 KJAC-4 TX 1345
Port Arthur
1940 WBRZ-2 LA 1230
4 Es 2200 KSNB-4 NE 1065
5 Tr 1700 WDIV-4 MI 280
1702 WXYZ-7 MI
1747 WJFK-2 MI
1900 CHET-9 ON
7 Es 2100 KTWO-2 WY 1420
2207 KWGN-2 CO 1405
8 Es 1700 WDIQ-2 AL
1701 WBRZ-2 LA 1230
1702 WWL-4 LA 1225
1800 WESH-2 FL 1110
1900 KJAC-4 TX 1345
1915 KPRC-2 TX 1410
9 Es 2000 WFBT-2 FL 1340
WDIQ-2 AL
2330 WESH-2 FL 1110
11 Es 1500 KTVI-2 MO 745
St. Louis
16 Es 1630 WDIQ-2 AL
1700 WFBT-2 FL 1340
18 Es 2000 KCKT-2 KS 1150
20 Es 2130 KPRC-2 TX 1410
2230 WBRZ-2 LA 1230
21 Es 1800 WWL-4 LA 1225
2000 WDIQ-2 AL
WTVY-4 AL 1025
26 Es 1800 KDFW-4 TX 1305
27 Es 1730 WFBT-2 FL 1340

August 1982

3 Tr 2200 WJAC-6 PA
Johnstown
4 Tr 1730 WGTQ-8 MI 315
2330 WWUP-10 MI
WPBN-7 MI 350
WTMO-4 MI
WNMU-13 MI 455
Marquette
11 Es 1100 KTVY-4 OK 1205
1101 KTVI-2 MO 745
1102 KCKT-2 KS 1150
1110 KLINE-3 NE
1120 KQTV-2 MO
1130 KSNB-4 NE 1065
WHPF-4 IL
1158 KTWO-2 WY 1420
12 Es 0005 KYCU-5 WY 1370
0021 KOA-4 CO 1405
0035 KXJB-4 ND
Valley City
0040 KNOP-2 NE 1165
Ms 1928 KOA-4 CO 1405
Denver
1929 KSNB-4 NE 1065
Superior
15 Es 2300 WDIQ-2 AL
2306 WTVY-4 AL 1025
2308 WWL-4 LA 1225
18 Es 1813 WBRZ-2 LA 1230
1814 WDIQ-2 AL
26 Es 2200 KJAC-4 TX 1345
WBRZ-2 LA 1230
WESH-2 FL 1110
September 1982
1 Tr 1200 WIXT-9 NY 175
December 1982
22 Tr 1100 WIXT-9 NY 175
27 Tr 1140 WDIV-4 MI 280
1145 WIXT-9 NY 175
"June was far better TV-Es-wise than July. August was a disaster. WCSH-6 Portland, ME in at 430 mi. 23 June was shortest ever Es here & tied my record...WCSH! I came home, I.D.'d WCSH, and it all died on me! The unided on

Eastern TV-DX

Saul Chernos; continued---

June 1983

July 2 was channel 2, (with British accent). World Cup Soccer. Caribbean or USA? I'd have much more but much of Es hit FM and I thus dx'ed there. The August 3-8 Tr was much better on FM and I got as far as Mankato, MN at 780mi. I've no VHF facilities (antenna-wise) in cas anyone noticed the glut of loggings above TV-13, heh! I've been in Ottawa Jan. 1 - April (near end) and thus no DX tried. I hear I didn't muss much. Will be at Burnt River from about May 28 to Sept. 5 so I might hit an Es opening or two. 73's and good DX 2 all!

George Rogers; 320 Lafayette Road, Chickamauga, GA 30707 EST

Here is my report for Eastern TV-DX. It has been a pretty good two months of TV-DX down here.

Feb. 1983

24 Es 1045 KJRH-2 OK 590
Mar. 1983
4 Es 1828 XHBQ-3 ZAC 1280
1850 XHRIO-2 TAM 1100
6 Es 0912 XEW-2 DF 1300
0914 XEZ-3 QRO "

Mar. 1983

7 Tr 0810 WATL-36 GA 113
0815 WANX-46 GA "
0820 WGTV-8 GA 120
27 Tr 0915 WVTM-13 AL 145
0928 WTTQ-21 AL "
0933 WALA-10 AL 385
April 1983
4 Tr 0830 WDCN-8 TN 129
0845 WCTE-22 TN 105
0935 WBIR-10 TN 111
8 Es 1500 XHRPM-2 CH 1100
12 Tr 0815 WTVK-26 TN 111
0915 WSJK-2 TN 125

April 1983

19 Es 1220 KTLA-5 CA 1890
Los Angeles
21 Es 1032 WFBT-2 FL 665
1038 ICR-2-2 Cuba
25 Tr 0805 WGRB-34 KY 215
Cambellsville
0815 WEKO-13 KY 191

(George; for some time now your distance measurements on your Es loggings have been off by quite a bit. I took the liberty of correcting some of them. I also suggest you find a different map to measure the distances on, i.e., one that's more accurate.--wd)

"The two days of Es in March were good ones to Mexico with the March 6th opening starting with 3 Mexican stations carrying the same program. The highlight of April was the logging of KTLA in Los Angeles at 1220 on the 21st. They had Johnny Grants morning talk show on at that time and I've got it in with a very snowy picture for 4 minutes before it faded out.

Here's hoping for a great Es season of 1983. From me to all WFFDA members lets have a lot of Es this summer; thank you."

On April 18, local chs. 5 and 11 (WFRV & WLUK) finish their network swaps. WFRV-5 (and WJMN-3) are now ABC and WLUK-11 is NEC.

A few months ago all three network stations (locals) started putting their call letters on the screen at 15 minutes before and after the hour in addition to the hour and half hour. Last week while I was watching the Brewers on ch. 26 I thought they jumped on the monkey wagon too. During each instant replay they would put their call letters on the screen. It got to be very annoying. I noticed the following day during another game they stopped this practice.

Here's some news of interest to the FM DXers out there. I was just listening to the news on the tube and some vandals cut the guy wires to WSEW-FM's (Sturgeon Bay, WI) 480' tower. They will be off for at least six weeks until the tower is replaced. WDRR-FM's tower which is near by and about the same height was untouched. Actually, I'm not surprised something like that happened. Both towers are located well off of any main highways and in the middle of nowhere. I was out there last year. WDRR's chief engineer is a member of the Door County Amateur Radio Club and he took a bunch of us out there one evening.

The Es season got off to a slow start here. I noted a few traces of Es on ch. 2 but it hasn't gotten any higher yet. Nothing identified either.

Question of the month: What is the height of a complete set of VUD's (except for the first issue. I don't have the Dec. 1967 issue.) stacked level, one on top of the other with all the air squeezed out from between the pages?

Answer: It will appear next month. I hope Es starts to appear also.--wd

# VHF UTILITY DX

Donald L. Blevins  
314 Langley Road  
Baltimore, MD 21221  
phone: 301-391-3408

VHF UTILITY DX....This month's feature will be a continuation of the series on FCC Radio Services and as such allocation tables and limitations on use are direct excerpts from the Federal Regulations.

My choice of Forestry-Conservation as the topic of discussion is designed to coincide with the summer vacation use of state parks. My experience in the past with these frequencies makes their use primarily dominant with warm weather recreation. Summer tropospheric conditions also make these stations a good bet for DX.

I will try to illustrate a sample of the Forestry-Conservation Service by my list of Maryland State Parks stations and frequencies. Again, when researching this service, try to match allocation tables with antenna size as illustrated in last month's feature "Power Radio Service".

Mr. Hank Holbrook of Chevy Chase, Maryland has some loggings from the area radio service, to make this month's feature interesting DX-wise.

I would also like to note the addition of a new antenna to my own shack, a 1/2 wave dipole cut for low band. Also note I raised my 1/2 wave ground plane antenna about 5 feet. I would like to hear from you about your shack.

Hank Holbrook 7211 Chestnut Street Chevy Chase, MD 20815 reports:

<u>8/10/78</u> 1408	N1008N	129.0	New York, NY	Saxonbury Ceramics
<u>12/06/82</u> 1402	WYU 9860	157.30	Annapolis, MD	Texaco Tampa
<u>1/15/83</u> 2002	Flight 145	130.0	Unknown	Continental Airlines
<u>2/6/83</u> 2045	G-AWNG	129.8	Martinsburg, WV	British Airways
<u>2/12</u> 2044	CG-QPW	129.8	Winchester, VA	Pacific Western
<u>2/27</u> 2120	N662JB	132.02	Dulles Airport, VA	Fuqua Industries Inc.
<u>3/5</u> 2211	CGFCP	132.02	Washington, DC	CP Air-Express 728
<u>3/9</u> 1807	N295US	129.8	Grantsville, MD	Northwest Orient
<u>3/13</u> 2038	N80AB	132.02	Somewhere, WV	Southern Services Company
<u>3/15</u> 2328	N754G	132.05	Washington, DC	Grumman Aerospace
<u>3/16</u> 2351	N225MC	131.725	Charlottesville, VA	McCall Coal Inc.
<u>3/17</u> ? ? ?	N7200E	132.02	Martinsburg, WV	Air Kaman Inc.

Donald L. Blevins 314 Langley Road Baltimore, MD 21221 reports:

<u>2/17</u> 0019	KEA 702	155.55	Bridgeton, NJ	Bridgeton Police
<u>4/17</u> 0022	KRI 742	154.725	Chester, PA	Chester Police
<u>4/23</u> 1003	KCO 372	33.82	Prince Fredrick, MD	Calvert County Fire
<u>4/19</u> 0119	KTK 634	46.18	Gettysburg, PA	Adams County Fire
0145	KTP 975	46.34	Fredrick, MD	Fredrick County Fire
2352	KGK 464	154.95	Easton, MD	Police Department
<u>4/28</u> 0050	KAV 708	154.13	Woodbury, NJ	Gloucester County Fire
0121	KEA 790	156.21	Salem, NJ	Salem Police Department
2304	KKC 815	155.07	New Bern, PA	Berks County Police Radio
<u>5/3</u> 1613	KAA 203	42.06	Kirkwood, MO	Missouri Highway Patrol
1635	KSD 393	39.50	Litchfield, IL	Litchfield Police
1638	KSE 450	39.46	Louisville, IL	Clay County Sheriff
1647	KJE 260	44.94	Chanute, KS	Kansas Highway Patrol
<u>5/6</u> 2354	KIC 367	159.165	Culpeper, VA	Virginia State Police
2358	KGR 371	155.43	Hanover, VA	Hanover County Sheriff
<u>5/7</u> 0019	KZW 933	154.37	Virginia Beach, VA	Virginia Beach Fire
0050	KXE 560	154.40	Grafton, VA	York County Fire
0103	KIC 469	155.31	Norfolk, VA	Norfolk Police
0109	KWV 442	154.415	Chesapeake, VA	Chesapeake Fire
0125	KUV 401	155.13	Chesapeake, VA	Chesapeake Police
<u>5/11</u> 2357		155.49	Wilmington, DE	New Castle County Police
2358	KZC 543	155.52	Vineland, NJ	Police Department
2358	KTE 505	155.625	York, PA	York County Police Radio
2359	KSZ 232	155.685	Lancaster, PA	Lancaster County Police
<u>5/12</u> 0006	KTO 396	154.74	West Chester, PA	Chester County Police
0009	KGA 819	155.13	Wilmington, DE	Wilmington Police
0017	KEB 384	155.13	Atlantic City, NJ	Police Department
2324	KGC 755	33.60	Lancaster, PA	Lancaster County Fire
<u>5/13</u> 0017	KEA 809	44.94	Galloway, NJ	New Jersey State Police
<u>5/14</u> 0857	KLD 844	158.97	Clayton, NJ	Police Department

Equipment for above loggings: Bearcat 210 Antennas: 1/2 wave dipole Trik-Stick  
1/2 wave UHF ground plane...1/2 wave ground plane VHF antenna.....

A Radio Shack cassette recorder is wired to the speaker output through an in line attenuator into a microphone input and a BPDT switch and a Radio Shack lapel electret condenser microphone. The switch is mounted in a mini-cabinet and features a SPST switch for the motor control for longer term recording as when E's and tropospheric enhancement occur.

Forestry Conservation Radio Service

30.86	2	151.385	6
30.90	2	151.400	6
30.94	2	151.415	6
30.98	2	151.43	6
31.02	2	151.445	6
31.06	2, 3, 4	151.46	6
31.10	2, 3, 4	151.475	6
31.14	2, 3, 4	151.49	6, 7
31.18	3, 4	159.225	8
31.22	3, 4	159.24	8
31.26	3, 4	159.225	8
31.30	3, 4	159.27	8
31.34	3, 4	159.285	8
31.38	3, 4	159.300	8
31.42	3, 4	159.315	8
31.50	3, 4	159.33	8
31.54	3, 4	159.345	8
31.58	3, 4	159.36	8
31.62	3, 4	159.405	8
31.66	3, 4	159.42	8
31.70	3, 4	159.435	8
31.74	3, 4	159.45	8
31.78	3, 4	159.465	8
31.82	3, 4	170.425	4, 9, 10
31.86	3, 4	170.475	4, 9, 11
31.90	3, 4	170.575	4, 9, 10
31.94	3, 4	171.425	4, 9, 10
31.98	3, 4	171.475	4, 9, 12
44.64		171.575	4, 9, 11
44.68		172.225	4, 9, 10
44.72			
44.76			
44.80			
44.84			
44.88			
44.92			
44.96			
45.00			
151.145	5		
151.16	6		
151.175	6		
151.19	6		
151.205	6		
151.25	6		
151.265	6		
151.28	6		
151.295	6		
151.31	6		
151.325	6		
151.34	6		
151.355	6		
151.37	6		

By referring to the number after the frequency you can determine the limitation that applies to the particular frequency in question. If the limitation does not apply to your particular area, then you may assume that particular frequency may be licensed in your area.

These frequency charts and the corresponding limitations are excerpts of Federal Rules and Regulations regarding the applicable services. I would like to thank Mr. Bill Fahber for the use of his material.

Location	Frequency	Call
Dares Beach	151.31	KUD 718
Annapolis	151.31	KJP 531
Catonsville	151.31	KGH 411
Florence	151.31	KZO 350
Germanatown	151.31	KQP 646
Jonestown	151.31	KFI 531
Laurel	151.31	KJP 530
Leonardtown	151.31	KDX 420
Lusby	151.31	KZO 351
Marriottsville	151.31	KAQ 782
Point Lookout	151.31	KJP 532
Rison	151.31	KQP 642
State Forest	151.31	KDS 643
Anne Arundel County	151.325	KGA 540
Berlin	151.325	KJP 525
Big Pool	151.325	KQP 649
Burkittsville	151.325	KTS 632
Cotoctin Furnace	151.325	KRM 935
Crisfield	151.325	KQP 643
Cumberland	151.325	KXK 338
Denton	151.325	KQP 645
Fredrick	151.325	KBU 666
Fredrick	151.325	KGA 556
Grantsville	151.325	KRP 883
Milburn Landing	151.325	KWF 683
Mount Lena	151.325	KQP 650
Oakland	151.325	KRM 934
Oakland	151.325	KRU 978
Queen Annes	151.325	KZE 767
Snow Hill	151.325	KJP 524
Thayerville	151.325	KKL 501
Thurmont	151.325	KKL 501
Chevy Chase	151.34	KXK 541
Baltimore	151.355	KGA 548
Bel Air	151.355	KJP 528
Chestertown	151.355	KIA 918
Elkton	151.355	KZJ 887
Ellicott City	151.355	KGA 539
Madonna	151.355	KGA 548
Northeast	151.355	KGA 553
Chase	151.415	KJP 526
Cub Hill	151.415	KVV 861
Elkton	151.415	KZJ 887
Forest Hill	151.415	KLW 353
Level	151.415	KWF 935
Northeast	151.415	KDK 778
Anne Arundel County	151.355	KGA 540
Bel Air	151.415	KJP 528
Madonna	151.415	KGA 548

Eligibility Any territorym possession, State, county, town and similar governmental entity, or persons or organizations charged with specific forestry-conservation activities are eligible to hold authorizations in the Forestry-Conservation Service to operate radio stations for transmission of communications essential to official forestry-conservation activities of the licensee. Application from persons or organizations other than governing entities must be accompanied by a statement from the governmental entity having legal jurisdiction over the area to be served, supporting the request.

LIMITATIONS

- 2) This frequency shared with the Motor Carrier Service.
- 3) This frequency is available for assignment only in accordance with a geographical assignment plan. The frequency used for conservation activities on a secondary basis to any station using the frequency for forest fire prevention, detection, and suppression.
- 4) This frequency is reserved primarily for assignment to state licensees. Assignments to other licensees will be made only where the frequency is required for coordinated operation with the State system to which rhw frequency is assigned. Any request for such assignment must be supported by a statement from the State system concerned, indicating that the assignment is necessary for the coordination of activities.
- 6) This frequency is not available for assignment to stations in this service located in Puerto Rico or the Virgin Islands.
- 7) This frequency is shared with stations in the Special Industrial Radio Service and evidence of interservice coordination is required.
- 8) This frequency is shared with the Special Industrial Radio Service in Puerto Rico and the Virgin Islands. All applications for the assignment of a new frequency or to change existing facilities in such a manner as to require frequency coordination for stations in Puerto Rico or the Virgin Islands, shall be accompanied by evidence of interservice frequency coordination.
- 9) This frequency will only be assigned only to licensees directly responsible for the prevention, detection, and suppression of forest fires, on a secondary basis to any U.S. Government station.
- 10) This frequency will be assigned for use only in areas west of the Mississippi.
- 11) This frequency will be assigned for use only in areas east of the Mississippi
- 12) In addition to agencies responsible for forest fire prevention, detection, and suppression, this frequency may be assigned to conservation agencies which do not have forest fire responsibilities on a secondary basis to any U.S. Government stations, provided, that such assignment is necessary to permit mobile relay operation by such agencies.



# REVIEW:

# CARVER

# TX-11

# FM TUNER

When I first started to hear about this amazing tuner, I must admit to being quite a bit skeptical about some of the incredible things the advertising promised. However, after I first tuned a demo model, I was very impressed. So impressed, in fact, that I decided to try one out on a one-week approval period. It only took three days to convince me that this is indeed, one of the most remarkable FM tuners on the market.

What impressed me first was the adjacent channel performance. This tuner has an almost unbelievable 38 dB of adjacent channel rejection, and that is the highest adjacent channel figure yet measured by several professional reviewers, including such notables as Stereo Review's Julian Hirsch. Overall, the selectivity "skirts" of the TX-11 are excellent. It should be noted that the alternate channel rejection is 90 dB--while that may not be the highest available, the very steep adjacent channel performance makes for a very hot FM DX machine, when used in conjunction with a directive antenna.

This seems to be the kind of tuner many FM DXers were eagerly waiting for. This is a digitally synthesized unit, and tunes in 100 kHz increments. Up until recently, such digital tuners and receivers have had a bad name in FM DX circles. More serious FM DX enthusiasts were quick to point out the fact that while the digital electronics may look "pretty," the really important DXing specs left a lot to be desired. It seemed as if you were paying for the digital display more than anything else.

In addition to inadequate selectivity, the most deficient areas of performance in many of the digital models has been in the IF and spurious rejection figures. The TX-11 offers excellent showings in these specs; their claims of 110 dB of IF and spurious rejection is backed up by the professional reviews. It can be argued, though, that a DXer needs every bit of this and then some, with even 120 dB of spurious and IF rejection probably not quite enough to cope with the local overload situation in an area with very strong signals.

Despite this fact, no synthesized tuner or receiver that I've tried (and I've tried quite a few of them) on FM with an antenna literally staring over the treetops at my very local 104.1's tower will do as well. In fact, I was not willing to use any kind of synthesized receiver for regular FM DX tuning before I first tried out a TX-11.

All the claims about this tuner being a true breakthrough in technology appear to be true. Unlike many other units, this one seems to have been designed to tune weak signals, and features special circuits that can process a weak signal to make it sound as good as a local.

The primary design objective of the Carver TX-11 almost sounds impossible: an FM stereo tuner that can tune stereo signals with about the same noise level as it can in mono. The result is astounding, because I cannot remember a tuner that has proved to live up to most all of the claims made for it before it even went into regular production.

## MANUFACTURER'S CLAIMED SPECS:

===== SPECIFICATIONS =====			
Tuning range	87.5 - 108 MHz		
Antenna terminals	75-Ω unbalanced coaxial input/300-Ω balanced input		
Intermediate frequency	10.7 MHz		
Frequency response	20 Hz to 15 kHz, ±1 dB		
Selectivity (at 400 kHz)	90 dB (narrow); 35 dB (wide)		
Capture ratio	1.0 dB		
AM suppression ratio	50 dB; 65 dB with CCD		
Image response ratio	110 dB		
IF response ratio	110 dB		
Spurious response ratio	110 dB		
Output level (75 kHz deviation)	700 mV, 600 Ω		
System	PPL crystal-locked digital synthesizer		
Power requirements	120 Vac, 60 Hz		
Power consumption	15 W		
Dimensions (w/h/d)	17.5/3.5/12.5" (without rackmount hardware)		
Weight	11.25 lb		
Supplied accessories	FM ribbon antenna, RCA-style patch cords		
	MONO	STEREO WITHOUT CHARGE-COUPLED DETECTOR	STEREO WITH DETECTOR
Usable sensitivity			
75 Ω:	11.3 dBf/1.0 μV	34 dBf/14 μV	16.3 dBf/1.78 μV
300 Ω:	11.3 dBf/2.0 μV	34 dBf/28 μV	16.3 dBf/3.57 μV
50 dB quieting sensitivity			
75 Ω:	16.1 dBf/1.7 μV	37 dBf/19 μV	21 dBf/3.1 μV
300 Ω:	16.1 dBf/3.4 μV	37 dBf/39 μV	21 dBf/6.2 μV
Signal/noise ratio			
75 Ω:	82 dB @ 85 dBf	74 dB <sub>1</sub> @ 85 dBf	85 dB <sub>2</sub> @ 85 dBf
300 Ω:	82 dB @ 85 dBf	74 dB <sub>1</sub> @ 85 dBf	85 dB <sub>2</sub> @ 85 dBf
Stereo separation (wide)			
		1 kHz: 45 dB	45 dB @ -10 dB
		100 Hz: 36 dB	30 dB @ -15 dB
		10 kHz: 36 dB	15 dB @ -23 dB

1 -- Includes full carrier jitter of test instrumentation.

2 -- Without carrier jitter.

Design and specifications subject to change without notice.



Of particular interest to the FM DXer is the new approach to FM detector design that Carver employs. The circuit, which they call a "Delta-Q detector," reduces noise by about 3 dB to begin with, before any additional signal processing takes place. This is probably the first real breakthrough in FM detector design in many years--perhaps even the only truly useful advance from the DXer's standpoint since the FET started to be widely used.

The Delta-Q detector actually varies the tuner's bandwidth to suit the signal strength. This is the kind of circuit action that many DXers have wanted for years. With bandwidth automatically responding to signal conditions, the effective signal-to-noise ratio will be about as high as can be achieved by a modern tuner design. In fact, almost all stereo signals that can be received by this tuner can be made to sound as clean as if they were in mono. It is actually possible to listen to weak meteor scatter in stereo, if you so desire.

Purists will object to certain automatic and "idiot-proof" features in the TX-11. First of all, there are a minimum of user controls--including no STEREO/MONO switch. Although this may sound shocking, the switch is not needed. The tuner will respond to a mono signal as a mono FM tuner would; whenever it encounters a stereo signal, it can be made to produce results that would be able to the equivalent of the best tuner switched into mono. The lack of a STEREO/MONO switch proves to be no problem, as long as you have the capability to switch to mono on your audio amplifier, when needed.

It is quite difficult to get used to an FM tuner that will perform as well in stereo as most other tuners do in mono. It takes some getting used to, but in the process, you may find that the special noise reduction and multipath circuits of the tuner (both of which are user selectable) come to be very useful for DXing. With the noise reduction circuit, you'll be able to listen to many more stations in stereo than you ever thought to be possible under normal conditions. I now have an FM translator on 105.5 at approximately 50 miles that can be made to sound like a local under the deadiest of conditions--in stereo, and using a TV antenna with rather ordinary performance on the FM frequencies. Friends and fellow electronics buffs who have seen this demonstrated are skeptical when I tell them, usually telling me that it would take a tropo opening to give me the type of signal needed for fully-quieted FM stereo from such a flea-power transmitter; they can hardly believe their ears when they find how "normal" this is for this tuner.

But the overwhelmingly astounding feature remains the adjacent channel performance of the TX-11. VUD editor Dave Nieman, who also acquired one shortly after seeing how it worked, just keeps logging new stations on a weekly basis, often under normal or normal-to-slightly enhanced tropo conditions, many of them on channels adjacent to locals or strong semi-locals that were tough to DX on before. The selectivity curve of the TX-11 can effectively open up many new (i.e., previously un-DXable) channels for FM DX! In fact, after six months of tuning this unit, often fed by a variety of unspectacular antennas, ranging from a piece of zip cord to a channel 2 to 13 log-yagi (in other words, everything but a really decent FM DX antenna such as the CM Stereo Probe 9), I am still often astounded by what it can do with a weak signal.

Rather than go on and on about the TX-11, I would rather suggest that you try to see one demonstrated, or better yet, if you are truly interested, try to find an audio shop that will let you try one on approval. One thing is certain about digitally synthesized units--they are not for everyone. In fact, it might be unwise for the avid FM DX enthusiast to use this as his or her primary tuner. It suffers from the same basic DXing bugaboo that all true digitally-synthesized tuners share: it tunes in increments. In this case, it's 100 kHz steps. You could conceivably miss out on a rare off-frequency station with such a tuning system.

In spite of this, most any FM DXer would benefit from the TX-11's performance--this is the first tuner to employ the charge-coupled device (CCD) in special signal processing circuitry, and may well be the first of many great tuners to come. It is certainly the first digitally synthesized rig that many FM DX enthusiasts will find to be a true DX machine!

--BILL THOMPSON

## VIDEO LINES

As a rule, TV DXers used to be opposed to the very idea of going on "The Cable." After all, most of us know we can already outdo the local CATV system when it comes to off-the-air reception of locals and even some semilocals.

But these days, almost every cable system has something of interest for almost everyone. You could run out and grab the satellite signals directly off the "bird"--but those days may be numbered, with the pay-TV programmers about to employ some fairly sophisticated signal scrambling. Besides, there are now more satellites out there than the average enthusiast can keep up with, and unless you're particularly well-off financially, you may have found that it was more cost-effective to just "give-in" and go on "The Cable."

Assuming everything else is equal, assuming there are no cable trunk "leaks" in your neighborhood, and assuming that you plan to use the same set for DXing that you're going to be using on the CATV drop, how do you learn to live with "The Cable?"

Peaceful co-existence is possible here. Again, this assumes everything is working properly--no leaks where they're not supposed to be, etc. What you are going to need is some kind of "A-B" switch. And forget about the kind of crap that Radio Shack sells for this purpose--it just won't have enough isolation between inputs. What will happen, if the isolation isn't high enough, is that you'll have unwanted CCI (co-channel interference) on every VHF channel that your CATV system gives you. In many cases, that's all of them, 2 through 13. Some systems trap out one of these as a "premium" channel, but that won't help much.

What you are going to need is something like Winegard's Cablemate, pictured above. Several companies are making similar products; the Winegard appears to be among the best, with isolation between inputs over 50 dB. It would be better to have a unit offering something like 90 dB or more isolation, but as such switches go, the unit pictured could be among the better ones, if you're willing to perform this suggested modification: cut their built-in balun off, and only use the switch for VHF. Install an "F" connector, and you can feed it directly to a 75-ohm input, if your set is "cable-ready"--or use the balun of your own choice.

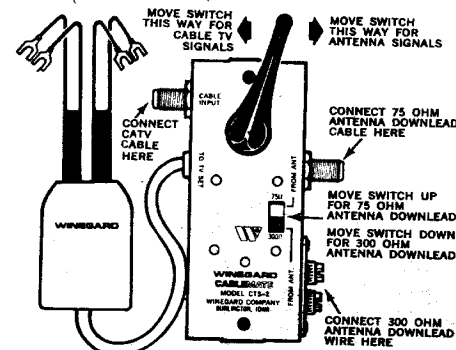
These switches wholesale for around 10 to 12 dollars. We suggest that you shop around, because with the cable TV explosion going on, improvements have been made rapidly. Insertion loss is around 0.5 dB on the worst VHF channel in the Winegard Cablemate, but one of their chief competitors now has a version that is said to be even better, with 90 dB typical isolation claimed at VHF, and even lower insertion loss than Winegard's.

Cable TV has its uses, even to the avid TV DXer. One of the best services offered to a tropo DX enthusiast is the 24-hour Weather Channel. With the right kind of A-B switch, you can make use of this to instantly switch back and forth during openings--and you won't have to fumble around in back of the TV with those F-connectors!

**STEP 1.** Mount Cablemate on back of TV set with screws provided so selector handle may be reached easily from front of set.

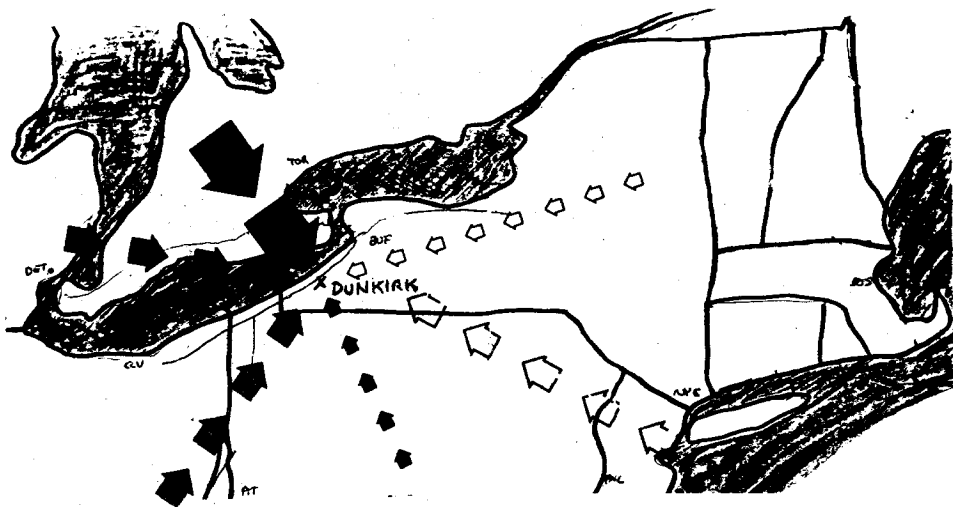
**STEP 2.** Make connections as shown below.

**NOTE:** Do not strip insulation from 300 ohm twinlead... just loosen screws, slide twinlead under serrated washers and tighten. Washers pierce insulation and contact wires.



WINEGARD COMPANY • 3000 KIRKWOOD STREET • BURLINGTON, IOWA 52601

# HEAD FOR THE HILL!



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- ANARC REPORT ON THE ASSOCIATION'S WASHINGTON CONVENTION
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