# WORLDWIDE TV-FM DX ASSOCIATION

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The Official Publication of the Worldwide TV-FM DX Association

SEPTEMBER 1990



## FromTheSTAFF

A BIGGIE!...We promised a large issue for September -- here it is! Parti of the reason for this is the numerous reports that can be found in the DX columns. While E-skip did not quite repeat the early-season ! spectacular performance, it did continue with a quite a few ! interesting (but widely-spaced) openings well into August. If nothing else, 1990's summer sporadic-E activity has been a very good example of one of the key mysteries of E-skip signal propagation--the geographical variation in the distribution of openings that takes to be a signal propagation of openings. place from year to year. It will also be remembered for high band and double-hop skip, both of which were noted by some lucky DXers. Next month's VUD is not likely to be quite as loaded with skip reports. However, it may be filled with tropo DX reports -- as we go to press, rapidly improving late August tropo TV/FM ducting conditions are building across Midwestern regions of North America.

WTFDA CONVENTION 1991, ANYONE?...Who will host the 1991 WTFDA convention? If you want to volunteer, you must put it in writing by October 1. Address your bid to: WTFDA Board of Directors, PO Box 514, Buffalo NY 14205-0514. A membership vote decides the site only if more than one bid is received by that date.

NEW WTFDA SUPPLY MANAGER...Veteran DXer and longtime member John Ebeling has offered his services to the club as new supply manager, a position that has been vacant many months. That means that we'll be able to offer items such as back issue VUDs for sale to members once again! Be watching upcoming VUDs for lists and information on how to order. Many thanks to John for coming forth to help out!

COLUMN NEWS...Computer hardware problems have put the TV CCI (UNIDENTIFIED DX) column on temporary hold...SATELLITE NEWS' annual rundown on television services available on the C-band "birds" is featured in this issue--and next month will look at the audio services carried on the same satellites...

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Thanks to FCC FM NEWS' Bruce Elving for providing this month's cover.

336 ATLANTIC ST BRIDGETON NJ 08302-2525

ABBREVIATIONS USED IN THIS COLUMN: AATm Height (meters) above average terrain AG Antenna height above ground ASL Antenna height above sea level Azimuth (North=0°) Ream Tilt Construction permit CRTC Canadian Radio-television and Telecommunications Commission Directional antenna ERP Effective Radiated Power FCC Federal Communications Commission (USA) measured along a horizontal plane In the direction or elevation of maximum signal strength Construction permit modification Transmitter or tower location carrier frequency offset 10 kHz above standard carrier frequency offset 10 kHz below standard carrier frequency not offset

#### APPLICATIONS FOR MEM TELEVISION SMOITATE

ST	CH	ERP	AATm	CITY/APPLICANT
LA	62	5000	585	Hammond; Pontchartrain Bong.
TISS.				Co. Inc. (reinstated)
LA	54	5000	280	Slidell; Trudy M. Mitchell
LA	54	14	153	Slidell; Unicorn/Slidell LPTV
ND	19	405	179	Ellendale; Prairie Public
16				Broadcasting Inc. (amended)

#### APPLICATIONS DISMISSED

LA New Orleans; ch. 20; Crescent City Broadcasting Corp.; Swan Broadcasting Ltd.; Tucker Broadcasting Company. (initial decision) LA Slidell; ch. 54; Trudy M. Mitchell. NV Las Vegas; ch. 15; PZ Entertainment

Partnership. (Review Board decision) NC Raleigh; ch. 50; The L Broadcasting Corp.

#### CONSTRUCTION PERMITS GRANTED ST CH FRP AATM CITY/APPLICANT

FL	35	5000	429	Miami; Miami Latino Bong Corp.
				(FCC decision)
LA	62	5000	425	Hammond; Florida Parishes TV Ltd.
LA	20	5000	276	New Orleans; Delta Broadcasting
1				of Louisiana Ltd. (initial decn)
MS	51	5000	440	Jackson; JAM Communications Inc.
PR	50	2000	342	Aquada: Channel 50 TV

#### CONSTRUCTION PERMITS CANCELLED

ST	CH	CALLS	CITY
GA	64	WGNM	Macon
KY	16	WLCT	Somerset
MI	46	WSKA	Port Huron
LA	62		Hammond (Florida Parishes TV)

#### APPLICATIONS TO MODIFY CONSTRUCTION neo ner neo nat ar ar ses

			L. L.	Dinn 11-0	COOL ME II AND
ST	CH	ERP	AATm	CALLS	CITY
ΑZ	46	4898	618	555	Green Valley (Sungilt Corp; amended)
co	53	5000	191	KWHD	Castle Rock
FL	58	100	50	WAWD	Fort Walton Beach
MI	18	8.91	73	WHTV	Jackson
NY	48	207	125	WYDC	Corning
TN	50	5000	239	WPGD	Hendersonville
TX	29	2570	141	KMPX	Decatur (amended)

#### CONSTRUCTION PERMIT MODIFICATIONS

1			ŧ	35 IPC (PO IN	
ST	CH	ERP	AATm	CALLS	CITY
FL	59	4966	289	WJEB-TV	Jacksonville
FL	62	4650	167	WBSV-TV	Venice
GA	64	52	185	WGNM	Macon
MS	40	5000	192	WBUY	Holly Springs
NY	48	207	125	WYDC	Corning
NC	35	1865	250	WJAE	Jacksonville
PR	36	1480	329	WDWL	Bayamon
					(data questionable)
TN	50	5000	239	WPGD	Hendersonville
WV	60	3923	307	WYVN	Martinsburg
1					

#### APPLICATIONS TO CHANGE EXISTING FACILITIES

١	ST	CH	ERP	AATm	CALLS	CITY
١	ΑZ	11	-	_	KMSB-TV	Nogales (cp; change city of license to Tucson)
١	CA	50	398	939	KFTY	Santa Rosa (cp)
1	MA	68	1350	249	WQTV	Boston (cp)
1	MD	47	2190	305	WMDT	Salisbury (mp)
١	NM	48	5000	134	KZIA	Las Cruces (mp)
1	NC	28	5000	585	WPTF-TV	Durham (cp)
١	NC	5	100	306	WRAL-TV	Raleigh (cp)
	NC	47	2000	186	WFXB	Rocky Mount (mp)
	OH	53	5000	364	WWAT	Chillicothe (cp)
	TN	66	2250	167	WJFB	Lebanon (cp; What about the CP in 12/88 VUD?)
1	TX	57	5000	585	KRTW	Baytown (cp)
	VA	29	5000	362	WVIR-TV	Charlottesville (cp)
1	VA	15	3112	634	WBRA-TV	Roanoke (mp amended)
	WI	25	560	306	WLAX	La Crosse (cp)

#### CHANGES GRANTED SHOITATE OR THE MIR

- AL Montgomery: WHOA-TV, ch. 32; granted license to cover mp for changes; ERP raised from 1120 kw max/813 kw hor to 4600 kw max; 548m AAT/540m AG/625m ASL (297m higher ASL); TL Az. 212° (between SW and SSW) TL 2.9 km from Gordonsville; coordinates 32°08'30"/ 86°44'43" (Az. 222°, or SW, 20.8 miles from former TL). This should spread their coverage area quite a bit SW to W of Montgomery, with little change in the direction of Montgomery; also looks like better DX with its improved signal strength and much higher tower.
- CA Santa Rosa; KFTY, ch. 50; granted cp to raise ERP from 302 kw max/209 kw hor to 398 kw max. No big change here.
- Las Cruces; KZIA, ch. 48; granted mp for changes; compare cp grant in 12/88 VUD

(then KASK-TV); mp still proposes increase from 80 kw to 5000 kw max; 134m AAT/143m AG/1399m ASL (160m higher ASL); TL 9 miles ENE of Anthony; coordinates 32°02'30"/106°27' 41" (Az. 134°, or SE, 26.01 miles from present TI).

NY Jamestown; WTJA, ch. 26; granted CP to reduce ERP from 659 kw max to 461 kw max; same TL CA Fort Bragg; KFWU, ch. 8-, went on the air and height: DA BT.

NC Raleigh; WRAL-TV, ch. 5; granted CP to reduce antenna height 11 meters (from original height before losing the tower) to 604m AAT/599m AG/695m ASI

OH Chillicothe: WWAT, ch. 53; another one of these complicated messes. The station was granted to raise its antenna 172 meters while remaining at 5000 kw ERP. I never heard any more about that permit. Now it is granted a license to reduce ERP from 5000 kw max to 2000 kw max. And a few days later it applied for this CP to raise ERP back to 5000 kw max and raise the transmitter 164 FL Key West; WETV, ch. \*13z, went on the air back meters higher to 364m AAT/354m AG/589m ASL.

Klamath Falls; KOTI, ch. 2; granted cp to raise ERP from 35.5 kw max to 85 kw max; lower antenna 8 meters to 671m AAT/47m AG/2001m ASL. Neither of two references mention a change in TL or new coordinates, but the existing TL is 4 miles ESE of Klamath Falls, and the proposed TL is on Mount Stukel, 15 km (9.3 miles) SE of Klamath Falls. This should make for better E-skip DXing.

TN Lebanon; WJFB, ch. 66; granted license to cover op for changes; ERP raised from 100 kw max to 250 kw max (BROADCASTING magazine reported 2250 kw, probably a mistake; can (little change, if any, in height); same TL.

TX Dallas: KDFW-TV, ch. 4; granted license to cover cp for changes: antenna height reduced 13 meters ASL to 511m AAT/456m AG/703m ASL; TL WI Racine; WJJA, ch. 49+, went on the air 1/27/1990; intersection of Belt Line Road and Mansfield Road, Cedar Hill; coordinates 32°35'06"/96°58' 41" (Az. 208°, or SSW, 0.23 mile from former TL.

Richland; KTNW, ch. 31; granted op to raise ERP from 57.2 kw max/21.2 kw hor to 70.5 kw max: raise antenna 3 meters to 370m AAT/17m AG/685m ASL; same TL. Don't get your hopes up.

WY Rock Springs; KGWR-TV, ch. 13; granted license to cover MP for changes; see 7/90 VUD.

#### CALL LETTER APPLICATIONS: EXISTING STATIONS

ST CH CALLS CITY/APPLICANT CA 62 KRCA Riverside; KSLD NY 50 WNNY Watertown; WFYF NC 47 WFBE Rocky Mount; WFXB

#### CALL LETTER GRANTS:

		ME	S MOLITE BU	
ST	CH	CALLS	CITY/APPLICANT	
CO	50	KSHP	Denver; KTDC	
GA	23	WELF	Dalton; WYDJ	
MI	53	WLAJ	Lansing; WLAJ-TV	
MT	23	KMTF	Missoula; KLFV	
OR	28	KEPB-TV	Eugene; KEPB	
WA	24	KPNP	Pullman; P-N-P Broadcasting	Inc
WV	60	WYVN	Martinsburg; WEWV	
IMA	.00	MIAIA	narinsburg, wewv	_

#### CALL LETTER ORANT: EXISTING STATIONS ST CH CALLS CITY/APPLICANT

CA 62 KRCA Riverside; KSLD

#### NEM STATIONS ON THE AIR

5/1/1990; 225 kw max ERP; 746m AAT/45m AG/1328m ASL; TL Cahto Peak, 3 miles northeast of Branscomb CA; coordinates 39°41'38"/123°34'43"; BT HOR; ABC affiliate, satellite of KRCR-TV, ch. 7, Redding CA; address: California-Oregon Broadcasting Inc., 755 Auditorium Dr. Redding CA 96001.

a cp a few months after its 8/31/87 sign-on CA San Luis Obispo; KADE, ch. 33z, went on the air 1/21/1990: 60.3 kw max ERP: 440m AAT/23m AG/778m ASL; TL Guesta Peak, San Luis Obispo County; coordinates 35°21'38"/120/39'21' independent station; address: Community Media Corp., 414 JHiguera St., Vuite B, San Luis Obispo CA 93401.

> in July, 1989 (confirming John Combs' comments in the 7/90 VUD that "it has been on the air for quite some time." 316 kw max ERP: 142m AAT/141m AG/142m ASL; TL 19 miles east of Key West on Cudjoe Key, 0.9 mile north of U.S. 1; coordinates 24°40'35"/81°30'41"; independent educational station; address: Palmetto Broadcasters, Box 321, Summerland Keys FL 33042.

> Fort Pierce; WTCE, ch. \*21-, went on the air 5/9/1990: 3097 kw max ERP: 147m AAT/143m AG/149m ASL: independent educational station; address: Jacksonville Educators Broadcasting, 1040 S. 37th St., Fort Pierce FL 34947.

anybody confirm?); 161m AAT/79m AG/350m ASL PA Philadelphia; WYBE, ch. #35-, reported in the 7/90 VUD: address:Independence Public Media of Philadelphia, 6117 Ridge Ave., Philadelphia PA 19128

> 2670 kw max ERP: 143m AAT/126m AG/339m ASL; TI 4401 E. Oakwood Rd., Milwaukee County: coordinates 42°51'18/87°50'41"; independent station: address: Racine Telecasting Co., 4311 E. Oakwood Road, Oak Creek WI 53154.

#### STATIONS OFF THE OPO II IFR

ST CH CALLS CITY OK 41 KGCT-TV Tulsa (2/1/1989) Johnstown (5/13/1990) PA 19 WEAT SC 40 WAXA Anderson (8/1/89)

#### NETMORK CHANGES

ST CH CALLS Now Was CITY KY 11 WHAS-TV ABC CBS Louisville KY 32 WLKY ? ABC Louisville NY 49 WNYB-TV ind FBC Buffalo NY 29 WUTV FBC ind Buffalo TN 24 WPTY-TV FBC ind Memphis ind FBC Memphis TN 30 WIMT TN 30 WXMT HSN FBC Nashville FBC ind Nashville TN 17 WZTV

#### DEC ACTO DES DE DI CACI

More information about TV Marti from a recent issue of BROADCASTING: TV Marti was broadcasting on channel 13 from 3:45 to 6:45 in the morning,

Havana channel 13 began operating at 6:00 a.m. market for 14 months and nobody bought it. The It now operates 3:30 to 6:00 a.m. from a balloon station's off the air and there's no prospect of 10,000 Feet above Cudjoe Key. It covers Havana it going back on the air. Nobody gave me the interference to U.S. or foreign television, plate with a plan I hope will work to provide the Broadcasts are heavily jammed.

TELEVISION NEWS - page #3

(Londonderry NH) in the 7/8 and 7/15 issues of applied for satellite status, which would permit the New Hampshire Sunday News. Continental Channel 21 to simulcast Channel 46 programs. He Cablevision, the fourth largest cable system in opted for a sister station arrangement so that the United States, is proposing CBS affiliation 'efficiencies and economies of scale' can make for one of its cable channels in Concord NH. some local programming possible through "New Hampshire viewers have gone to out-of-state independent producers based in New Hampshire." stations...since the former WNHT, Channel 21, I quoted extensively from this second article threw in the towel on a 14-month experiment as a to bring out Fergie's sheer hypocricy in this CBS affiliate and signed off for good on March matter. The FCC has on many occasions granted 31, 1989. Plans by Boston Phoenix publisher exceptions to its own rules, and this case is Stephen Mindich to acquire Channel 21 from the typical. And Fergie becomes the self-proclaimed Flatley Company for a reported \$1.5-million do defender of the FCC rules only when it affects not include CBS programs." "Area broadcasters his profits. As if the FCC needs somebody from are watching developments closely. A first-of- the outside to tell it when somebody wants its-kind arrangement between CBS and Continental permission to violate regulations. And Fergie is generally seen as undermining a network thinks that the needs and interests of the system that began with radio."

The 7/15 article deals more specifically with another television station? Come on! WNHT. "A potential competitor has complained to pretends to be a defender of the public interest the [FCC] about plans to put Concord's dormant while in reality he's out to protect his own Channel 21 back on the air as a sister station greedy interests. to a Massachusetts TV outlet. John Fergie, executive vice president and general manager of broadcasters burn me up. WGOT, Channel 60, contends that the FCC 'would be putting a Boston station in our state capital was first seen with low power testing 2 June if it goes along with a proposal developed by (color bars and no audio). Programming began Boston Phoenix publisher Stephen Mindich, Sunday 10 June. Schedule is 4 hours per day Mindich's Roque Television Corp. is in the process 7 pm to 11. Most programs are tapes made by of buying WNHT from the Flatley Company, for a other public stations. Although the Phila and local shows over Channel 21 from studios of start of operations). Signal strength is located in Boston. Channel 21 would carry many excellent here at my location about 22 miles west with the FCC to call attention to the areas where Ch 42 Univision translator. he believes Mindich's concept violates agency "Also new to the airwaves is W46BL, the

duopoly rules regarding signal overlap for good (almost snow free) and much better than Channel 21. Fergie maintains that FCC rules from the Ch 26 WNEP translator. forbid any overlap of the outer edge of either "DXers with MTS receivers should note that the station's signal pattern, referred to as the SAP channel can provide assistance in station Grade B contour. He said the two stations would identification. In this area WGBS and WGAL carry have to be located 82 miles apart to prevent local (Phila and Lancaster) NWS weather radio full signal overlap. Fergie is also rankled that time, Also, rush hour traffic reports have been Mindich doesn't plan Concord studios. 'The FCC heard on WFMZ. The only other SAP activity requires the main studio to be within the city noted here are 'talking books' on NJ public TV grade contour,' according to the Channel 60 Chs 23 and 52." executive. Channel 21's city grade signal won't LESLIE PRICE (Wilmington NC) writes, "Since even make the Massachusetts border, let alone Interstate 40 has opened up between Wilmington 90 over Boston, he added. Mindich could operate and Barsto, California this area has been a boon either Channel 21 or Channel 46 but should not town. Now there is more debate about Ch. 10 a be allowed to have two TV stations in the same full power station." (There is a proposal to add market, Fergie argued. "We're licensed to serve a ch. 10 assignment to Wilmington, which would the needs and interests of the community. I change the offset of WAVY in Portsmouth. -wbf) don't know how you can do that from Boston. "Do you know where WAVY Ch. 10 Portsmouth has I'd be really surprised if it goes through moved their tower? (I can't find anything saying because it's so contrary to the commission they planned to move it. It should still be in regulations,' Fergie said.

but had to change its schedule on July 2 when said: "My feeling is that the station was on the with a Grade A signal, yet creates no station. It wasn't free. I stepped up to the marketplace with programming which it doesn't Two interesting articles from JOHN BOLDUC have at all now. Mindich said he could have

community can best be served by depriving it of

I'm sorry, but some of these two-faced

From JOHN ZEIS (Exton PA): "WYBE, Ch 35, Phila reported \$1.5-million and has outlined plans to Inquirer had a feature on the station in May, no telecast satellite-delivered Star TV programming listings are carried (or even an acknowledgement of the same programs as WHRC-TV, Channel 46, of the transmitter. The antenna is side mounted which Mindich hopes to begin operating south of on the WTXF tower (ch. 29. -wbf). Just below the Boston, Fergie said he filed an informal objection Ch 35 angenna, I believe is the antenna for the

Allentown translator for WGBS (ch. 57 Phila. -wbf). "Mindich has asked the FCC for a waiver of Signal quality here, about 40 miles distance is

Driver, VA. -wbf)

"Mindich, when informed of WGOT's objections, "WIOBZ tower and studio is I block from I-40

just NE of Wilmington," "Also, it is impossible to "The fellows at Warren Publishing who made us Carterette Co, near Cedar Island."

people are showing an interest in launching a current editions are interested only in Volume 2 Channel 10 in Wilmington, but the developer of a (predominantly cable info) and would like to low-power television station says those moves will dispose of Volume 1 (the 'stations' section which not affect his plans to go on the air Sept. I. A is of primary interest to DXers). I told him this group called Wilmington Minority Broadcasters has would probably be of interest and we agreed petitioned the [FCC] for rights to build a full- that if and when such single copies of Volume | power VHF-TV station, to broadcast on Channel become available he will contact me and I'll notify 10, at a site about 31 miles northeast of WTFDA members in the VUD. Interested parties Wilmington." (Let's get this story straight, since would deal directly with the company or individual the journalists can't. They applied to have a desiring to sell...including negotiating a price, channel 10 allocated to Wilmington. If that is probably about \$50 (if not quoted in the original done, then anybody can apply to construct a notice). Be on the lookout for periodic television station. I suspect the 31 miles availabilities of Volume 1. We'll see how this northeast is to provide minimum mileage works, and if it's unsatisfactory in any way we'll separation from WIS-TV in Columbia SC.) "In terminate the program," January, 1989, the FCC allocated Channel IO to a In another letter, "WTVF is now airing a live network affiliate"

released July 5, would also require a partial AM; land late Sun./early Mon. regular programming amendment of the channel allotment to WAVY ends at 2AM and they sign back on at 5 AM. The Television Inc., which operates Channel 10 in interesting thing about the overnight news is Portsmouth, Va. 'To my understanding, the that they have 'shrunken' the picture and the Portsmouth station moved its transmitter, so that 'NewsChannel 5' logo is always on screen (lower there is now a window for a Channel 10 statation 1/5 of picture-centered). No call letters are between Portsmouth and Columbia, South Carolina, seen, but it ought to be easy to spot. Bolton said." As I said, I see no record of proposed changes there.

luck, Wilmington's sixth television station will be overnight. At least the last time I saw WSB on the air in time for labor Day. With a little that's what they were doing. Could be misleading more luck, it will be a Fox affiliate. Co-powner and lead to incorrect solutions for unids." Philip Bolton said he hopes to have WIOBZ, a low- And in a third letter: "Regarding your comment power VHF station, broadcasting by Sept. 1. The on the 'b&w ID slide that WTVF used to run all new station, which will broadcast on Channel 10, night... I hink that brand of root beer must be its studio at 5223Market Streeet. Bolton, a thought of a root beer bottle on the screen all Greensboro lawyer, also said he is trying to night IS amsing." (My mistake on one thing, I affiliate with the Fox Broadcasting Co.... 'They found out that the root beer is A&W. not B&W. seem interested,' Bolton said in a telephone wbf) interview. 'Fox has a stated policy to be skeptical of low-power TV stations, but it has two Harrisburg, IL runs ads for OMAHA FURNITURE licensed itself." "The station must clear one (huge lettering) in Omaha, <u>Illinois</u>. It would be more legal hurdle from the FCC, the granting of easy for DXers to see that and be misled to a final designation of license. Toward that end, think they were getting KMTV (3) from the REAL Bolton and his partner, David Anthony, who will be Omaha!" (Commercials can be misleading. One time the "new station's engineer, have been running I saw a CERTS commercial and thought I had signal tests in recent weeks. If approved, Canada, -wbf) WIOBZ would be the second low-power TV station in the Wilmington market. W20AL, a religious 'vintage' W0C-tv 5 slide during the peak of the station operated by Good News TV Broadcasting Es season! Can you imagine seeing that sucker Inc., has been broadcasting on Channel 20 since on channel 6..in 1990..and trying to figure out

Also from Leslie, "Jacksonville's WJAE-TV 35 proposes a 820 ft. antenna II miles N.E. of your readers that if they see WJBK-TV 2 IDs Burgaw, N.C. State Road 1318 [coordinates] 34 and programs on UHF channel 38, they are 37 27 N & 77 49 58 W. Power will be 1,865 kw watching WADL-38, Mt. Clemens MI. WADL-38 is (vis). Also, WRAL-TV-5 has proposed 100 kw (vis) currently operating Channel 2's 5pm newscast at 1,981 ft. 1.6 miles S.E. Auburn, N.C. 35 40 35 N & 8-8:30 p.m., and channel 2's 6pm news from g-78 32 90 W (Leslie, double check those 9[30. In addition, the 11pm news is simulcast on coordinates. -wbf). I believe WRAL-FM will be on both stations." the same tower. Also, WPTF has plans for a 2,000 ft. tower in the same area."

get Ch. 8 in this area. I believe the antenna is the recent offer on 1988 TV Factbooks called about 800 ft. and on the outer banks of the today to sound me out on another proposal. The firm sends sales reps to various cable From the 7/19 Washington Morning Star: Many conventions and on occasion purchasers of

low-power TV station, WIOBZ, which Greensboro local newscast at midnight and then goes into a lawyer Philip Bolton wants to launch as a Fox satellite 'News Channel' service until 5AM weekdays. Late Sat., early Sun. AM they don't "The FCC's complex rule-making action, RM-7183, start the news feed until 2AM and run it until 6

"Another thought. Late nite DXers who see CNN Headline News on 2 need to be aware that On W10BZ, Leslie sent this article: "With a little WSB (GA) and WKRN (TN) both air that service

recently had its transmitter tower erected near regional...we don't have it down here. Still, the

"BEWARE OF FALSE OMAHA'S! WSIL-tv (3) in

"Hey, it's a good thing that KWOC didn't run the what the 8%?# was going on?"

From JAMES J. NAHIRNIAK (Warren MI): "Warr

Running out of space. More from James, Dave Sinclair and Bill Nienejadly next month, Please A few letters from TODD BRYANT (Nashville TN): excuse any spelling and typo errors this month.



Readers' Reports

Larry Fuss reported in from his travels in ID, confirming that KNAQ Rupert is silent (apparently not on its old frequency of 92.1 or its new 92.5 channelpossibly in the process of moving). 'Il.e station in Chubbock, monophonic KRCD-FM 98.3, "had an awful signal and even worse audio processing. Sounded like they were barely on the air." Not the most robust possibility for DXing, I'd say.

Dr. J. J. Rosenberg comments about what Tim Hendel asked regarding hearing 99.1 in Toronto: "During July 5-15 incl., an experimental demonstration of digital radio took place in Toronto. In order to compare to conventional radio, they rebroadcast various Aid and FM stations on 99.1 as part of the demonstration." Joel has written an article for the VUD on this, and he mentions the tests were to have moved to Montreal and Vancouver in August.

Another Canadian reader, Mike Cherry, points out the excellent article in the July, 1990 "Popular Communications" by one Alice Brannigan on Edwin H. Armstrong, "Definitely required reading by us FM enthusiasts! There is a good picture of the original tower erected by Maj. Armstrong as it looks today. It would be well-worth ordering this issue a back-issue through the publication.

"I have been way too busy to get hold of CBC Engineering in Vancouver regarding the latest batch of relayers of originating station CBU (690 AM service) but have noticed announcements on both AM (gasp!) and FM services mentioning some of the frequencies/QTH that I gave you. I'll try to get this, or perhaps Dave Sinclair can call them. ... My subscription to 'FMedia!' expires Dec., 1990. Enclosed is \$50.00 U.S. to extend the subscription for another two years. I have enough faith in FMedia!s ability to survive to confidently extend for two years! It's a great publication and a super-companion to your 'FCC-FM' News column (which doesn't pay the bills!)... I should get this in the mail to you and try and get a report written for Fred McCormack's TV column."

Frank Merrill, like myself, missed this year's WTFDA convention. He was to have been at a high school reunion. He hates to see all the power upgrades, especially on formerly only Class A FM frequencies-all of which can conspire to ruin DXing. He'd like the Atlas to list formats by frequencies, and I considered that when Ernie Cooper asked for such, I don't have the time to punch in all that information there, and it would be too cluttered to print out. He also suggests the TX map be redrawn, possibly combining it with neighboring states, like the TX panhandle with OK. Trouble is, OK is optimium size, and were I to include the TX panhandle OK would have to shrink. Not the 1990 edition, but possibly the edition or so after that will see an improved TX. NM, too, is optimum size, and should not be reduced to show the El Paso-Fabens area on it.

Frank accuses me of jumping the gun and showing stations on frequencies they'll move to before they actually do. He says the "M Street Radio Directory" doesn't. Well, let's compare. He uses as an example his local WJEQ Macomb, which I showed on 102.7, with no entry on its previous frequency, 103.1. "They didn't move to 102.7 until two weeks after I got my Atlas!" I'd say that was excellent timing; for most of the life of the book you had the station on its correct frequency! I

powers and frequencies-not former facilities. When it is likely a station is stalling in changing frequency or in coming on the air, you'll see a notation on the maps, "moving from" or "off the air."

Since you asked, Frank, let's take this month alone. The following stations have changed frequency or are about to: WFFN Codova AL from 92.9 to 95.3, KBSS Booneville AR from 92.1 to 104.7, KMTS Glenwood Springs CO from 92.7 to 99.1. I struck out on KAVI-FM Rocky Ford CO, which will not be moving to 95.5; it is still on 95.9, but is seeking 95.3. It did have a CP for 95.5, but apparently got the channel changed and did not move. Also, WRAJ-FM Anna IL from 92.7 to 96.5, KCMR Mason City IA now on 97.9, having moved from 98.3, KQQF Coffeyville KS now on 98.9, having just moved from 92.1, WCOZ Paris KY moving from 96.7 to 96.9, WIDL Carol MI now on 92.1 (from 104.9), KZBK Brookfield MO from 97.7 to 96.9. KEMX Locust Grove OK 94.5, not to come on previously-ennounced 100.7, KYQT Newport OK 102.7 from 102.5, KVHT Vermillion SD 106.3 (having moved from 102.3), WRJT Monterey TN 106.9 from 107.1, WJMA-FM Orange VA making a sudden switch from 96.7 to 98.9, and WAZR Woodstock VA 93.7, having moved from 95.9. I expect most of these changes will be made within six months, and as such the old frequency can be ignored; you can keep your own records of stations about to change, if you wish. Now if the M Street Radio Directory does a better job of showing stations on their true frequencies than the FM Atlas, let's do a little comparing-my 1989 FM Atlas with the 1990 M Street Directory. Let's only compare stations that have made the frequency changes from the above list. For KCMR, M Street only shows 98.3 listed-you DX 97.9 and hear something, wow! it's KCMR- "how come?" you ask? My 1989 book also shows it on 98.3. Even worse, the M Street book shows KQQF Coffeyville KS as 92.1 (and no mention of 98.9), while my much older FM Atlas says about KQQF, "to go to 98.9." Again, in M Street, no hint that WIDL Caro will move to 92.1. KWNG 105.9 Red Wing MN has been on that frequency (from 105.5) for months, but M Street lists it as 105.5, with an application for 105.9. KVHT is listed under previous call letters of KVRF in M Street only under 102.3, with no mention of 106.3, My 11-year old Atlas has a note about KVHT "to go to 106.3." Again, M Street misses the boat on WJMA-FM Orange's and WAZR Woodstock's frequency changes. I stand by my way of listing frequency and other facilities changes. Now with the FCC in such a deregulatory mood, you can expect other stations to change frequencies almost the day they apply for such changes-witness the rapid changes for WIDL Caro, KCMR Mason City, KQQF Coffevville, KVHT Vermillion and WJMA-FM Orange.

Frank also kindly sent word on several stations having stereo, and he correctly points out that in the case of Georgetown TX, KQFX, it got its power increase on 96.7, without ever having to change to 96.5. William Dickerman's heard the new WVIA [Scranton] 89.3 Williamsport translator, having moved from 100.1. He likes the small Sony ICF-SW7600, "a real marvel." covering FM and AM/shortwave 150 to 29999 kHz.

Nothing much from Bill Nienanjadly this month, except DXers in NY might realize that former zookeeper Scott Shannon doesn't rule the L.A. radio roost like he did at WHTZ. His morning show is only No. 19 in that market on KQLZ. At least he's consistent, remaining on 100,3 at both stations for all the skip listeners everywhere to tune in. By skip, he's got the contintent covered, right? Foul-mouthed Howard Stern is doing some TV, show stations with their CP status, which includes but his bosses at K-Rock 92.3 don't want him talking

about that on his radio thing for for FM radio reception than the fear he'll leave them for the greener



SCOTT SHANNON

pastures of TV and all the DXers he would bring with him from FM. Bill says WMSC \*101.5 Montclair NJ takes its carrier off when not broadcasting, which helps his DXing. "You are right about skip/trop stations being harder to tune in with filter modification, Selectivity vs. sound quality-suggest install molex 'IC' pins, and when you're having trouble copying stations install a wider filter and leave the cover off so this can be quickly accomplished. No news about 110/ 130 filter availability, Murata/Erie NO help whatsover in getting an order together. I can't make all those long distance phone calls to all these companies! Other members should do detective work in locating 110/130s. We had six people including me calling and tracing down the filters! How about our other 350 members helping out now? Apathy?"

Mike Bugaj talks about local WPKX 97.9 Enfield CT coming on the air with \$, k, "Kicks 97.9," but only promoting Springfield and MA, reserving its legal ID to about 10 minutes to the hour, WFCS New Britain has migrated to 107.7 from 97.9. "Have any idea who sells those 110 kHz filters?" Not really, a distributor in Minneapolis was to have had some samples shipped here. I don't know if I want to try them-might be too restricting in audio quality and might chop off SCA. I'm happy with 150s and 180s, I installed SCA in an Icom R7000. The set had been modified with a 50-kHz FM filter, but the reception was almost unintelligible, and I am not sure it helped with adjacent channel reception at all, using WCTS \*100.3 Minneapolis, next to local WSCN \*100.5 [transmitter | Duluth as a criterion, Installing SCS in the Icom was not difficult, and it's a lot more sensitive

Radio Shack Pro-2006 (however AZ Page K261BX 100.1 (KCKK 101.1 Kanab costing about three times more).

Louisiana's Jeff Kruzka corrected the nonID of WQID 93.7 Biloxi MS as still being "93.7 QID," not "The Q." He heard by skip a "Highway 101," 100.7, k, but I have no idea what that would be. Somebody sent a radio log from the Portland Oregonian, giving a few program highlights, but no frequencies mentioned.

Karl Zuk mentions the Monitoring Times, International Radio Club of America convention Oct. 5-7. 1990 at Knoxville TN. You can hear international broadcasters and meet Bob Grove and others from MT by sending in \$30 to PO Box 98, Brasstown NC 28902. The banquet is an extra \$18.40.

Keith Pugh sent a lot of station news, and he reported getting KVHT Vermillion SD on skip on its new 106.3 frequency. He uses the radio logs as aids, not as absolute bibles, and was able to DX this station on its new frequency which had eluded previous lists. As you dial around and note stations that may have migrated on the dial, write in and share the news, noting especially whether they or other stations you write about broadcast in stereo or not.

W. R. McIntosh sent a long article from L.A. about FM stations trying for nonDXers in the offices. There's a contest among them to get workers involved in contests to bolster the stations' ratings, Some offices, however, prefer quiet and would rather employees kept the radios or headphones off. Stations going after the workers most earnestly are KPWR, KOST, KBIG, KXEZ and KLIT, all FMs. However, Muzak claims to have the ultimate format for in-office listening, basing its claims on many decades of serving the market through businesses willing to subscribe to get

Nigel Pimblett of Medicine Hat AB and I both received KPCL 95.7 Farmington NM, and that station mentioned each of us to the other. Nigel says he uses my FM Atlas, "and have found it to be an invaluable aid to my FM listening. In fact, I've even mentioned it as such in the QSL column I edit for the Canadian International DX Club. I'm a shortwave listener first, with FM being basically a summertime break, so I don't buy every edition, but usually every second one. I believe I got my current one from Universal Radio in Ohio."

Now to the FM station news of this month, Look also for "See Also," which continues where last month's column was chopped off.

New FM Station Grants UT), on air [U., sharing time AZ Phoenix \*89.5 270 h,v; 259 m, AZ State/ \*89.5 90 watts h,v; 446 m, Maricopa County Community College, AZ State to broadcast Tuesday, Thursday, Saturday and alternate Sundays, while Maricopa County Community College will have the channel Monday. Wednesday, Friday and alternate Sundays, AR Marked Tree 93, 7 3000 h,v; 100 m CA Bakersfield 99,3 3000 h.v: 100 m CA Soledad 105.3 830 h.v: 213 m, S. Radio FL Cedar Key 102, 7 3000 h.v FL Key West 107.9 100000h, v:141 m FL Palm Bay \*88.5 1000 vertical only; 30 m, (d-a), g, Victory Christian Academy FL Stuart WCNO \*90.9 100000 h,v; 55 m, g, National Christian Network, co-owned with WMIE \*91.5 Cocoa FL. Did not delete, and not in Palm City FL. Came on the air during Easter week, NCN has future expansion plans, "but will go into markets only where there is no Christian outlet." Stereo? GA Ocilla 98, 5 3000 h, v; 100 m ID Lower Stanley (assumed located below "Stanley" ID) K216CD \*91.1 (KBSU) IL Kankakee 95.1 3000 h,v; 100 m IL Spring Valley (Peru) 103.3 3000 h,v; 100 m IN Anderson 98.7 3000 h,v; 100 m, A. University IN Terre Haute \*88, 5 550 h, v; 308 m, q, IL Bible IA Eldora 99. 5 3000 h,v: 100 m, E, W, Bie MA South Yarmouth 103.9 3000 h.y.: 100 m MI Port Huron 102.3 3000 h,v; 91 m, P. H. Family Radio-grant reinstatement MN Browerville KXDL 99.7 3000 h.v; 100 m. Allyn B Sterrel Im MN Public Badin MN Thief River Falls \*91, 5 84000 h.v: 198/ NM Los Lunas 106.3 3000 h.v: 100 m NY Honeque Falls 107.3 3000 h.v: 100 m NY Voorheesville (Albany) 96.3 200 h.v: 341 m NC Topsail Beach 103.9 3000 h,v; 100 m OH Toledo \*88.3 110 h.v: 38 m. U. of Toledo: to share time with WXTS 88.3 Toledo OR Banks 107.5 2000 h.v: 121 m OR Seaside 94.7 3000 h.v: 100 m PA Mount Carmel 99.7 1000 h,v; 159 m

PA Riverside 92.3 440 h,v; 254 m SC Bishopville 93.7 3000 h,v; 100 m, JKRC Central Communications SC Cayce\*88.7 150 h,v;43 m, g, Bible Bostg./ SC Kershaw 106.1 3000 h,v; 100 m SC Walterboro 105.3 3000 h,v; 100 m TN Goodlettsville 97.1 50000 h,v; 150 m TN Waynesboro 94,9 3000 h.v: 100 m

TX Bryan 99.5 3000 h,v; 100 m TX Liberty 99.9 50000 h,v; 143 m TX Nuenster 106.5 3000 h.v: 100 m VT Sunderland 95.1 45 h,v; 734 m VA Coeburn W201AI \*88,1 (WMMT 88,7

AR Camden \*89.5 KCAC

Whitesburg KY) [g, Central WA Ed. Found. WA Wapeto (Yakima) \*89.5 15000 h,v; 297 m,/ WY Burns 101.9 50000 h,v; 150 m

#### Call Letters Assigned AZ Tucson 99.5 KIIM"-FM" (from KIIM-FM)

CA Auberry 105.1 KXDR CA Bakersfield 107.9 KUZZ"-FM" (KUZZ-FM) CA Chowchilla 93.3 KXDA CA Merced 107.7 KXDE CA Mojave 97.7 KAVS (not changing to KHXT) CA Morgan Hill 96.1 KSJQ (KRAC) CA Randsburg \*89.7 KGMB (KGBM) CA Sacramento \*88.9 KXPQ CA San Francisco 98.9 KDBK (KOFY-FM), this and next station now known as "Double 99

CA Santa Cruz 99.1 KDBQ (KLRS-FM) being bought by Viacom, along with KDBK 98.9 San Francisco, Both stations now simulcast, helping resolve an interference problem each station has experienced from the other,

Facilities Changes Granted AL Cordova WFFN 95.3 (from 92.9) 2200 h,v; AL Selma WDXX 100.1 50000 h,v; 88 m, C2

AR Booneville KBSS 104,7 (from 92, 1) 50000 h,v; 150 m, C2, format to kg CA Colusa KKLU 103, 1 130 h,v; 599 m CA Los Angeles KPFK \*90.7 112000 h,v (863 m), "I'm the C.E. for KPFK, I used to take

Ir, "Q-106.5" IN Nappanee 95,7 WXJG KS Arkansas City 106.5 KYQQ (KWKL),/ KS North Fort Riley 102.5 KXDJ KY Greenville 105,5 WWHK (WGKY-FM) on the air with," KY Louisville 103.9 WZKS (WXLN), r, "Kiss" CA Santa Monica KSRF 103.1 3000 h.v. 81/

KY Mount Vernon 102,9 WX.LI LA Tioga 103.5 KLAA (not KLLA) -70 m (25000 h,v) ME Kittery 105.3 WKCD (WYCD) CO Rocky Ford KAVI-FM 95.9 (not moving to ME Milbridge 93.7 WXJH

MI Fremont 100.1 WSHN-FM (not WSHN, as given on p 112 Fill Atlas-12), still k FL Maccienney WJXR 92,16000 h,v(100 MI Grand Rapids 98,9 WXJI MI Lapeer 103.1 WWGZ (WDEY-FM), rm.

Wings 103.1" FL Titusville WPIO \*89.3 7000 h,v; 91 m MI Oscoda 95.7 WXJD MN Albert Lea 94.9 (moving to, from 95.3) adds v KRGR (KCPI), mr, no nonID

MS Jackson 96.3 WJDX (WSLI-FM) MS Newton 106.3 WMYQ-FM (WMYQ), both WMYQ AM and FM are silent MO Seligman 95.3 KESE (KJEM), b, "95 FM,"

has stereo NJ Margate City 96.1 WMXL (WFOU) NM Espanola 102.3 KMYK (KMID) NM Los Alamos 106,7 KBOM (KPZA), o[Idies], dropping Spanish

FCC-FM

DE Lewes 105.9 WXJN

GA Omega 107.5 WXJF

IL Bethal to 95,5 WXJO

CA Tracy 100.9 KSGO (KYBB)

Unistar ol dies, "Q-96.7"

FL Arcadia 98.3 WOKD-FM (WOKD)

IL Le Roy 104.1 WRXZ (WMLA-FM)

IN Columbia City WBBE (WZRQ), to be \$

GA Richmond Hill 105,1 WRHQ

CT Stamford 96.7 WQQQ (WJAZ), now o,

NY East Windham \*89.9 W210AP NY Henderson 100,7 WX.IE NY Mount Hone \*90 1 WDHZ (WEXX) NC Burgaw 99.9 WVBS-FM (WVBS) NC Laurinburg 96.5 WMXF-FM (WSTS), r, CHR NY Moyock 92.1 WTZR (WOFM), p

QH Belore \*91.7 WMBP (WQHD) OH Clevel and 99.5 WGAR"-FM" (WGAR-FM) OH Gallipolis 101,5 WGTR "-FM" (WGTR-FM; AM gets new calls) Inn classic rock

OH Port Clinton 94.5 WXKR (not WXOF) / OK Okmulgee 94.1 KTHK (KOKL-FM) PA Avis 99.9 WHUM "-FM" (WHUM-FM) PA Elizabethtown \*88.3 WWEC (WQHE) PA Grove City 95.1 WRKU-FM (WRKU) PA Pittsburgh 104.7 WEZE-FM (not WESE-FM) PA Sall adasburg 95.5 WKHL-FM (WKHL; AM is

in Hughesville) (is in Charleston) SC Goose Creek 94.3 WUJM-FM (WUJM; AM/ SC Pageland 102.3 WMAP-FM (WCPL) SC Surfside Beach 103, 1 WYAK-FM (WYAK) TN Gattinburg 105.5WDLY (WSEV-FM), "Dolly-

wood Radio" (for Dolly Parton) TN Harrogate 96.5 WXJB TN Surgoinsville 104.3 WEYE (WLKW) TX Dallas-Fort Worth \*90.1 KERA-FM (KERA)

105.3 KRSR (KQZY), rm, "Star 105.3"; its SCS has tM . 67: tR . 92 TX Devine 92.1 KTXX (not KYTX, which is in Beeville TX, 97,9)

TX Houston 96.5 KHMX (KNRJ), "Mix 96.5", r, "modern rock"

TX Kenedy 92.1 KKCR (KTNR) TX Littlefield 95.5 KXDM UT Coalville 92,5 KCUA VA Emporia 99,5 WXJA (WEVA-FM) VA Farmville 101.3 WXJK VA Lynchburg 105.9 WMXQ

WV Dak Hill 94.1 WXAS (WVMA) WI Lomira 106.7 WFDL, to 2000 h,v; 120 m WI Waupun 99.5 WPKR (WGGQ)

ON Sudbury 92.7 CJRQ (CIGM), r, "Q-92" ON Timmins 92.1 CJQQ (CFTI), "Q-92," r "Good luck on FM Atlas-13. Hope

to see it in the fall."

[m, d-a, adding vertical

AR Beebe KPIK 101.5 6000 h,v (100 m)

care of KSRF and KXLU as well, but it got to be too much to do all three. . . I installed the transmitters that these three stations are now Im. d-a

CO Glenwood Springs KMTS 99, 1 (from 92,7)

95.5; seeking 95.3) CT New Britain WFCS \*107,7 (from 97,9)

FL Mexico Beach WLPC 99.3 50000 h,v; 150 m,/ GA Albany WGPC-FM 104.5 100000 h,v; 299 m,

GA Greensboro WDDK 103.9 100 m (3000 h,v) IL Anna WRAJ-FM 96.5 (from 92.7) 22500 h,v; 227 m, adding vertical, C2

IL Monmouth WMOI 97,7 3400 h,v: 134 m IN Angola WLKI 100.1 2100 h.v: 120 m. IA Ida Grove KIDA 92.9 15900 h,v (91 m), to return with \$1 teren1

IA Mason City KCMR \*97.9 (having moved from 98.3) 4500 h,v (91 m) KNIQ there has not yet moved to 93.9 from 93.5. [from 92, 1 KS Coffeyville KOOF 98.9, having moved/ KS Goodland KKCl 102.5 217 m (100000 h.v)

KY Burnside WJDJ 93.9 50000 h,v; 150 m, now on with that power, rp format KY Murray WBLN 103.7 201 m (100000 h,v) KY ParisWCOZ 96.9 (from 96.7) 50000 h.v; 150

LA Galliano KBAU 94.3 25000 h, v (91 m), C3. "Is hard to get here in New Orleans, thanks to adjacent WXLT 94, 1 McComb MS, which IDs

as McComb-Baton Rouge." ME Rockland WMCM 103,3 31200 h,v (187 m) MA Boston WERS \*88.9 4000 h,v; 186 m MI Caro WIDL 92.1 (having moved from 104.9) "Suffered interference from WORS 105.1

Detroit and WKJC 104.7 in East Tawas," MI Houghton WOLF 96.3 177 m (100000 h,v), still on 97.7 [(195 m) MN North Mankato KDOG 96,7 1400 h,v/

MN Red Wing KWNG 105.9 50000 h,v; 150 m, C.7 Inow "Z-95" MS Marion WZMP 95.1 182 m (26000 h,v),/ MO Brookfiel d KZBK 96,9 (from 97,7) 27500

h,v: 48 m, C2 MO Gordonville KTXI 99,3 91 m (3000 h.v) MO St. Louis KWMU \*90.7 100000 h,v; 305 m NV Jean K232CP 94.3 (back to, from K285--104.9)

NC Charlotte WMXC 104.7 100000 h,v; 376/ OH Millersburg WKLM 95.3 d-a OK Locust Grove KEMX 94.5 (from 100.7)

2300 h v: 112 m OK Stillwater KOSU \*91.7 308 m (100000 h,v) OR Creswell KERT 95.3 400 h,v; 368 m OR Newport KYQT 102.7 (from 102.5) 99200 h v: 274 m C1

OR Portland KUFO 101.1 100000 h,v; 498 m PA Curwensville WOKW 102.9 350 h,v; 288 m SC Hanahan WAVF 96.1 440 m (100000 h,v) SD Vermillion KVHT 106.3 (having moved from 102.3) [7000 h,v; 183 m, C3

TN Monterey WRJT 106.9 (from 107.1)/ VA Danville WAKG 103.3 199 m (100000 h.v) VA Harrisonburg WZJW \*88.7 390 h.v: 20 m VA Orange WJMA-FM 98.9, having moved from

VA Winchester WTRM \*91,3 6000 h,v; 411/

VA Woodstock WAZR 93.7 6000 h,v; -3 m, having moved from 95.9

Stereo, or to be \$tereo AL Dadeville WDVI \*88.7, gr AR Hot Springs KALR \*91.5 CA Visalia KARM \*89.7, g FL Port St. Joe WMTO 93.5. r. on air IA Iowa Falls KIFG-FM 95.3, mk KS Burlington KSNP 95.3, k, ID with Le Roy

LA Lake Charles KOJO \*91.7, g wil Vassar WOWE 98.9 s, "Wowie" MS Greenwood WGNL 104.3 MD Cameron KDEE 92.3, k, "K-Lite 92.3," simulcast with KAYO, "Ozark 98," 97.7 Warsaw MO Ifield new on air MO Republic KADI 99.5, gr, ID with Spring-/ MO Tarkio KTRX-FM 93.5, k, finally embraces

stereo NE Alliance KTNE-FM \*91, 1, cn-the station Mike Cherry heard via skip in BC

NE Hastings KLNE-FM \*89.1, cn NE Lexington KLNE-FM \*88.7, cn NE Norfolk KXNE-FM \*89.3. cn NY New York WNYE \*91.5. The only other old

school-board station known not to have stereo is KSLH \*91.5 St. Louis. OK Heavener ("heave-en-ur") KPRV-FM 92.5

(V CRS) [SCS, "Bright 105" (strict) OK McAlester KZBX 104.9, †U 67 kHz/ DK Taft KHJW 100.3 rk TN Crossville WEGE 102.3, k, on air, simul cast-

ing with AM station WCSV TN Parsons WK ID 973 k TX Beeville KYTX 97.9, r, "Y-98." Note its calls

are not reneated in Devine TX TX Premont KMFM 104.9, Spanish, g TX Winfield KYKM 97.7

VE Verecruz XHRN 96.5, "Radio Alarea"

Monophonic CO Iganacio KSUT \*91,3 IL Havana WDUK 99.3 IA Boone KFGQ-FM \*99.3 IA Des hioines KUCB \*89.3, still with low power; KDMI 97.3

IA Harlan KNOD 105,5 MA Worcester WICN \*90.5, heard recently with classical; assumed to be a temporary stereo

outage OK Bethany KNTL 104.9 "no stereo-only in commercials. There is no advantage to stereo with our talk format and we may stop using

it." Remove stereo listing. OK Eufaula KCES 102.3, all k OK Henryetta KVAZ \*91.5, g, heard carrying USA Radio Network commercials

TX Bishop KFLZ 107.1, Spanish, I, remove stereo listina

See Also August-July VUDs For: (all are for August, except where noted) AL Selma WALX 100.9 Laser 101, Nienajadly, p. 18, Bugai, p. 20

AR Camden KCXY 95.3 Y-95, Burrows, p. 11 CO Glenwood Springs KMTS 99.1 (moving from 92.7), †U, 67, Ebeling, p. 15 CO Salida KVRH-FM 92.1 †U, Ebeling, p. 15

CO Wray KATR 98.3 off air? Allen, p. 30, got KBBN 98.3 Broken Bow NE in the same direction without mentioning hearing KATR

DE Georgetwon WZBH 93, 5 ID with Ocean City and Salisbury, Burrows, p. 10 FL Clewiston W213- \*90.5 is probably the

translator Hepburn (p. 27) heard; but I show it relaying WAYJ \*88.7 Fort Myers FL FL Fort Myers WSRX \*91.5 The Spark, Falconer. p. 16 [†M, Ebeling, p. 15

FL Port St. Joe WJST 94.5 tU, 67 (not/ FL Venice WCTQ 92.1 k (from b), Ebeling, p. 15 IL Robinson WTAY-FM 101,7 Tay FM, Brum-

field, p. 24

KS Derby KRZZ 96.3 op , Stati on News, p. 22 KS Scott City KSKL 94.5 r, Falconer, p. 16; "Cool 94.5," Cherry, p. 23 LA Clinton WOCK 92.7 Fela, p. 12, lists as contemporary Christian, while Smolarek, p. 22, shows it as r; the latest I saw for it is "k" LA Monroe KNOE-FM 101.9 K-102 (from "All Hits FM 102"), Ebeling, p. 15 LA New Roads KOXL is 106.5, not 106.1, Ebeling, p. 15, "Q-106" noni D MD Federalsburg WDLE 107.1 apparently silent, Station News, p. 15 [KNJR, Merrill, p. 14 MN Collegeville \*88.9 is KNSR, not/ MT Kalispell KBBZ 98,5 tU, 67, Ebeling, p. 15

NJ Vilas WLQE 98.7 ID with Rio Grande-Wildwood, Burrows, p. 10 NM Carlsbad KCDY 104.1 has \$[tereo], Falconer, p. 17 NM Clovis KCLV-FM 99.1 Country 99, Sittel / NY Cazenovia WITC \*88.9, having moved from 90.9 Nordovist, p. 11

NC Raleigh WYLT 96.1 Lite 96.1 (from 'W-Lite") Sittel n. 36 NC Nags Head WNHW 92.3 "Carolina 92," Station News, p. 22; is k, Coniglio, p. 38

ND Valley City KOVC-FM 100.9 Gold 101, [rm, Falconer, p. 17 Pugh. p. 29 OK (not TX) Weatherford KBXR 97.3/ PA Ridgebury WMKB 96.9 is mono, o, Station News, p. 15 [\$, Nordquist, p. 11 TX Lufkin KSWP \*91.1-I need to know ifit has/ TX Palesti ne KLIS 96.7 96-FM, Falconer, p. 16 TX San Antonio KTFM 102,7 Hot 103, Falcon-

KZEP-FM 104.5 K-Zep, Falconer, p. 17 TX Winfield KYKM 97.7 has \$tereo, Buntin, p. [Buntin, p. 19, July 19, July [Buntin, p. 19 UT Salt Lake City KLZX-FM 93.3 Z-93./ VA Hampton WWDE 101,3 ID with Norfolk-Virginia Beach, Burrows, p. 10

VA Norfolk WLTY 95.7 Oldies 95.7 (from "Y-96"), Station News, p. 15 WI Sturgeon Bay WDOR-FM 93.9 has been listed ascountry, playing country oldies? Falconer,

p. 25, July. WY Laramie KCGY 95.1 note "Y 95" nonID. not "Y-106," as given in FM Atlas-12, p. 159 ON Ohsweken CFNC 103.9 kr, 15 m (10 watts

h), no stereo, Hall pp. 24, 25, July ON Wingham CKNX-FM 101.7 won't be moving to 104.9; only its low power [translator] in Meaford is apparently on the air on 104.9, [p. 17, July Hall, p. 23, July

VE Veracruz XHRN 96.5 has \${tereo}, Pugh/ M Street Radio Directory (Hall, p. 22), can be ordered direct from PO Box 3568, Alexandrig VA 22302 at \$29.95 plus about \$2.50 shipping and handling. It lists AM and FM stations, formats, facilities by geography and frequency, I like its listing of stations by call letters, and as such it can supplement the "FM Atlas."

#### Formats

Formats are the same as in the Fill Atlas AK Fairbanks KXLR 95.9 o, SMN Pure AK Nome KICY-FM 100.3 rg, "Y-100" (strict) AZ Kingman KGMN 100.1 k AZ Phoenix KMEO-FM 96.9 mr, "soft AC" AR Jacksonville KEZQ-FM 100.3 mr CA Carlsbad KKOS 95,9 m, "bright AC" CA Davis KI CO 105 5 or "classic rock" CA Los Angeles KTWV 94 7 ri more so than mi CA Pebble Beach KSPB \*91.9 still r. operates evenings only from Robert Louis Stevenson High School | I on with B1 power and site CA Ridgecrest KZIQ-FM 92.7 rm, "Q-Lite,"/ CA Visalia-Fresno KFSO 92.9 o FL De Funiak Springs WQUH 103.1 k FL Miami WLYF 101.5 m, "80% vocal" HI Honolulu KIPO-FM \*89.3 jc, also news KHHH 98.5 rj, more so than mj

HI Kealakekua KOAS 92,1 rm

IL Coal City WKBM 100.7 o, \$

IL Dwight WKDL 98.9 to be o[Idies], \$? IL Eldorado WEBQ-FM 102.3 k IL Loves Park WLUV-FM 96.7 r, "The Heat" IL Marseilles WKOT 96.5 to be o. This, Dwight and Coal City form a triangle just SW of

Chicago with an oldies network. IL PeoriaWSWT 106.9 mr-"another b bites the/ IL Watseka WGFA-FM 94.1 k IN Brazil WSDM 97.7 k IN Cannel ton WKCM-FM 102.9 k KS Emporia KNGM \*91.9 gr, still \$, tM 67

KS Wichita KGAM \*90.7 gr, \$ LA Hammond KSLU \*90.9 jr, "jazz and more" MN Litchfield-St. Cloud KMXK 94.9 mj, still [Pure, "K-93" "The Mix" MS Holly Springs WKRA-FM 92,7 a, SMN/

MS Jackson WJM1 99.7 s, still "Power 99" MO Butler KMOE 92, 1 k, \$ MO Clinton KDKD-FM 95.3 k, \$ MO Kansas City KMBR 99.7 mr MO Liberty KXXR 106.5 s, "X-106" MO PoplarBluff KKLR 94.5 k, "Clear Country/

MO Sparta KLTQ 96.5 rm, \$,1D with Springfield NE Beatrice-Lincoln KTGL 92.9 op, "The Eagle" NE Lincoln KUCV \*90,9 cn, \$ NE Omaha KESY-FM 104,5 m, still many b

selections, especially daytime NE West Point KWPN-FM 107.9 rm, "FM-/ NE York KAWL-FM 104.9 c NV Carson City KRWR 94.7 rm NJ Atlantic City WFPG-FM 96.9 r, CHR/pop,

not "hard, al bum rock" NJ Trenton WKXW 101.5 ot, ol dies and talk NY Dansville WACZ 93.9 rt, mono, "Z-94" NY Ithaca WVBR 93.5 rp WQNY 103.7 op, "Classic Q" (strict) NY Southold WBAZ 101.7 mm

NC Wanchese WOBR-FM 95.3 rm NC Whiteville WZFX 99.1 s, "99-1 The Fox" OH Canton WHBC-FM 94.1 rm OH Cincinnai WWEZ 92.5 mr, soft AC

OH Elyria-Clevel and WNWV 107.3 rj OH Fredericktown WJMR 98.3 rm OH Middletown WPFB-FM 105.9 k, "The Country Rebel"

OH Nelsonville WAIS-FM 107.7 k OK Edmond KTNT 97.7 mj with "contemporary jazz. I hope you will listen to us as you go' OK Pauls Valley KGOK 97.7 r

OK Perry KJFK 105.1 rm, "K-105 FM" OK Seminole KSLE 105.5 k, \$, "105 Country" OK Tahleguah KEOK 101.7 k,\$

OK Woodward KWDQ 102.3 o OR Cave Junction KCNA 102.7 k OR Roseburn KRSR 103 1'rm PA Clarion WCCR 92.7 r, CHR

PA Pittsburgh WHTX 96.1 e, portending an oldies war with WWSW 970 and WWSH 99.7 PA Shamokin WSPI 95.3 rm

SC Columbia WCEZ 93.5 mr SC Greenville WFBC-FM 93.7 o, still "B-93.7

SC New Ellenton WAJY 102.7 rm SD Pierre KLXS 95.3 o, "Classic 95.3" TX Eastland KVMX 96.7 mr, Drake soft AC TX El Paso KTSM-FM 99.9 mr · [sive rock] TX Fredericksburg KFAN 101.1 p[rogres-/

TX Houston KRBE 104.1 sr, still "Power 104" TX Luling-Austin KAPT 94.7 k, "The Cat," via satellite, no SCS (had †U 92) TX Odessa KKKK 99.1 gr UT Richfiel d KKWZ 93,7 rm

VA Lynchburg WKZZ 100.1 rm WA Bellingham KZAZ \*91.7 to be cn, hoping to have come on in August, along with a translator on a yet-unnamed frequency on Mount Constitution to serve the San Juan Islands: other translators are planned for Anacortes and Port Angeles WA. To be \$ tereol?

WA Moses Lake KDRM 99.3 ro WA Omak KOMW-FM 92.7 k

WV Ripley WCEF 98.3 k WI Sheboygan WWJR 97.7 rm WY Jackson KMTN 96.9 r ON Ohsweken CFNC 103.9 kr, mono, 15 m (10 watts horizontal; hopes to go to 50 watts)

#### On the Air (Selected)

IL Le Roy WRXZ 104.1, having moved from 92.7, ID with Bloomington-Normal IL Urbana WK10 92.5, having moved from 103.9 IA Sinux Center KTSB 93.9 (from 94.3) MN Cloquet-Duluth-Superior (WI) WSCN \*100.5, mono, having moved from 100.9 MN Tracy KARL 105.1, rm. Didn't delete, \$? NY Brockport WBSU \*89.1, having moved from TX Odessa \*90.5 KENT-FM, but still using KEHC call letters

#### Off Air, or Not Yet On

AL Linden WDAL 98.5 AK Anchorage KXDZ 103.1 AK Sol dotna KUHK 96.5, but advertising for/ CA Paradise KCHH 103.5, still on 92.7 GA Sparta WHAN 102.7, one of the Thomas Root partnerships; CP has expired, but can apply for reinstatement of expired CP IA Grinnell KICL 106.7 IA Onawa K000 102.3 IA Sac City KSRG 105.1 KS Caney KEOJ 101.1 KS Emporia KGZF 99.5 KS Eureka KOTE 93.5 KS Hutchinson KFRK \*91.5 KS North Newton KBCU \*88.1 MI Highland Park WHPR \*88.1 MN Hermantown W280CT 103.9 MS Ellisville WJKX 102.5 (still on 102.3) MO Clinton KLRQ 96.1 MO Liberty KWJC \*91.9-for the summer? MO Versailles KLGS 95.1

NE Auburn KAUB 105.5 NE Blair KBWH 106.3, left air about July 1; heard in stereo as late as June 27. "The small

stations around here get bought and sold and they come and on." NE Omaha KPQB \*88.1 NE Winnebago KSUX 105.7

NJ Franklin Lakes WRRH \*88.7 NY Binghamton WUCI \*91,5-has been on the air other summers, but they "were housed in extremely cramped quarters downtown and were always strapped for funds."

NY Vestal W209AJ \*89.7, even though always mentioned by WSKG \*89.3 Binghamton in its hourly legal ID

NY Wurtzboro WZAD 97.3, may come on as rlassical

OK Guthrie K201-- \*88.1 OK Sulphur KFOM \*91.1

TX Carrizo Springs KCZO 92.1, "came on temporarily, but has been silent for several

KQMG 93.5 "silent for some time," remove \$

TX Farwell KLZK 98,3 AZ Williams KDAN 96.7

FL Kissimee WOOG \*89.5

#### Deletions

NH Gorham WMIH 107.1 OK Ardmore K252CA 98.3 OK Choctaw K202BH \*88.3 OK Del City K288CT \*105.5 OK Edmond K228CB \*93.5 OK McAlester K221CC 92.1, K237BF 95.3, K240BF 95.9, K280CH 103.9 OK Moore K296Cl 107.1. 'We no longer run that translator, and you should find reception improve in Moore after we replace our old transmitter and go for an upgrade" at KTNT 97.7 Edmond-Oklahoma City OK Norman K201 -- \*88.1, still on air, but to be

displaced by new KMSI \*88.1 Moore K237BT 95.3 OK Sallisaw K221CK 92.1 OK Webbers Falls K220BL \*91.9

SCServices, 57, 67 and 92 kHz From a Muzak franchisee to the father of one of my associates: "I hear your son is up to his old tricks. Please do what you can to control his behavior,"

"Thank you for adapting my Sangean ATS-803A radio, and your fast return of my radio. I am quite pleased. Also thanks for those back issues of my FMedial subscription." Other SCS news is in FMedia!

#### NonIDs, Not Just Stogans

Mentioned on the air usually without call letters; "strict" if a station only uses call letters once per 31 FM Stations Subject to FCC Downhour as required by the FCC (at or near the top of the hour)

AL Fayette WTXT 98.1 98-TXT, ID with Tuscal oosa [Combination AR Berryville KSCC 107.1 Country/ AR Osceola KMPZ 98.1 Z-98 (from "Power 98") CA Johannesburg KRAJ 103.9 The Heat CA Lancaster KGMX 106.3 K-Mix FM CA Prunedale KLVM \*89.7 and Santa Rosa KLVR \*91.9 both Love Radio, still gr DC Washington WAMU \*88,5 88 Plus FL Micanopy WLCL 97,7 Clear 97 FM GA Bainbridge WJAD 97.3 97-3 JAD (not 'The Hot FM") GA Fort Valley WKXK 97.9 98-Kix, 1D rotating among Byron, Perry GA Sparta WSKS 97.7 97.7 Kiss (from "Kiss

HI Hanolulu KHFX 105.1 The Fox HI Kailua KRTR 96.3 96 FM (from "Crater (Station (from "FM-101") HI Lahaina KLHI 101.1 Your Super-/ IA Atlantic-Omaha (NE) KXKT 103.7 The Kat

(sic. strict) ID with Council Bluffs IA Waverly KWAY-FM 99.3 K-Way FM KS Haysville KXLK 105.3 no nonID, no "FM 105 "still has tU 67

MS Aberdeen WWZQ-FM 105,3 ZQ-105 MS Biloxi WQID 93.7 still 93.7 QID, although still "The Q" at times

MS McComb WXLT 94.1 Sunny 94 NE Grand Island KSYZ 107.7 Sunny 108 (from "The Great 108") NC Banner Elk WZJS 100.7 Z-100, \$[tereo]?

NC Burlington WPCM 101.1 no nonID, saying "Country 101.1 WPCM" NC Charlotte WBT-FM 107.9 Sunny FM, still r NC Elizabeth City WMYK 93.7 K-94, but some

injection also of "Power 94" OK Chickasha KXXK 105.5 no nonID, no "KX-105"

OK Oklahoma City KLTE 101,9 K-Lite 102, o OK Poteau KLMK 107.3 K-Country PA Honesdal e WDNH 95.3 Variety 95 SC Spartanburg WSPA-FM 98.9 Light and Easy

98 9 FM TN Etowah WD RZ 103.1 Superpower 103 (from "Z-103") 197 FM'') still b TN Knoxville WEZK 97.5 97-FM (from "Easy/ TX Austin KHFI 98.1 K-98.1 (from "K-98")

TX Denison KDSQ 101.7 The Heat (from 'Power 102" TX San Antonio KZVE 107.5 Que Suave (Spanish, which sounds like "K Suave")

UT Salt Lake City KLZX-FM 93.3 Z-93 WV Romney WJJB 100.1 Jibb-100 WY Laramie KCGY 95.1 Y-95 (not "Y-106," as given in FM Atlas-12, p. 159)

ON Kingston CFMK 96.3 no "K-96" nonID. 'They use their call letters very often, A rariety for a Canadian station."

Multi-City IDs in Use [Censored] [by FM (Selected) AM Happenings Most Likely Caused/ IA KLSS AM 1010 donated by the Hedbergs to the U. of Northern I A and will relay KHKE \*89.5 Cedar Falls, subject to FCC DK KS Topeka WREN 1250 still off the air MN Litchfield KQIV 1410 silent. MS Marion WJDQ 1240 silent. NC Hickory WSPF 1000 silent. OR Coos Bay KYNG 1420 silent (had been talk): FM on 106.5 still on the air. TN Dyersburg WDSG 1450 silent WI Appleton WRJQ 1570 silent. Radio Shack discontinues its 12-1933, car AM stereo-FM stereo radio-the only such model known to exist in that company's line.

Easy Listening FMs an Endangered Species

be automatically downgraded on 25 kw or less and whose antenna height above average terrain provides a 60 dB by June 3, 1991 to prevent an automatic downgrading. Here's the preliminary list of commercial stations which could face downgrading:

requency Class Station Location	New Cl
92.3 C2 KDDR-FM Oakes ND	A
93.7 C2 WNBY-FM Newberry MI	A
93.7 C2 KSPI-FM Still water 0 K	C3
94.3 C2 WMUM Mari on FL	A
95.1 C2 KTTI Yuma AZ	A
95,7 C2 KPER Hobbs NM	C3
96.1 C2 KICX McCook NE	A
96.5 C2 KUHK Soldotna AK	C3
96.5 C2 KLWD Sheri dan WY	C3
97.3C KDMI Des Moines IA	C1
98.1 C1 KLEF Anchorage AK	C3
98.1 C2 KWLF Fairbanks AK	C3
98.1 C2 KRXK-FM Rexburg ID	C3
99.1 C2 KMTS Glenwood Springs	CO C3
99.1 C2 KAFR Angel Fire NM	C3
100.5 C2 KBFX Anchorage AK	C3
100.7 C2 KLVF Las Vegas NM	C3
100.7 C2 KJAS Jasper TX	C3
100.9 C2 KDYC Grants NM	A
101.1 C2 KJJZ Kodiak AK	A
103.1 C2 (new?) Sitka AK	A
104.1 C2 KSDM International Falls	NIN C3
104.1 C2 KTIL-FM Tillamook OR	C3
104.7 C2 *KUAC Fairbanks AK	C3
104.7 C2 *KCAW Sitka AK	A
105.1 C2 KTKU Juneau AK	Α.
105.1 C2 KZUL Lake Havasu City A	AZ C3
105.9 C2 *KRBD Ketchi kan AK	C3
105,9 C2 KUIN Vernal UT	A
106.5 C2 KYNG-FM Coos Bay OR	C3
106.7 C2 KGTW Ketchikan AK	A

#### NAB/Denon Sign Pact to Produce AI/I-FM Tuners

Denon America, Inc. will manufacture and sell a "high quality" FM-AM tuner, which will replace the model that bombed out at Radio '88 in Washington DC. It's a tuner that will be made to broadcast industry specifications, including NRSC circuits for better AM fidelity and reduced interference, FMX to "enhance FM stereo fringe-area reception," AM stereo, AM noise blanking to cut static and noise and expanded AM band capability to tune in the new 1605-1705 kHz range, have

provision for external AM antenna and a 30-station preset memory that can intermix AM and FM stations at the listener's choice. It's to be manufactured by Denon's parent company, Nippon Columbia, and will carry Denon and NAB names and should be available in stores by early 1991 at a retail price of \$475. NAB members will be able to buy them at a

This tuner will be suitable as an in-home monitor for broadcast station personnel and consumers who want to feed their home hi-fi systems with the best quality audio signals from AM and FM broadcasts," said NAB Senior VP/ Science and Technology Michael Rau.

#### Broadcasters Continue to Defect From Easy Listening

Bonneville Broadcast System's Jim Op-The FCC has issued a list of stations to sitnik speaks out against the trend, saying 'The belief many former Easy GMs have June 4, 1991, unless they file to improve when changing to Soft AC is that the their facilities to retain their present audience will stay with them because classification. Most are C2 stations with they have no choice. The reality is that many simply turn off the radio, There is a growing segment of disenfranchised listencontour of 39 km or less. They must file ers who now have no station, and others who perceive that music stations all "sound alike. I see this as a danger for broadcasters, , , A well-programmed and marketed Easy Listening station continues to be a viable entity with the active. upscale 35-54 consumer. . . The properly lass programmed and promoted Easy Listening - station is as viable today as it was 10 vearsago." Stationsknown to have dropped the easy listening format in just the last month are: KMEO-FM 98.9 Phoenix AZ. WJCL-FM 96.5 Savannah GA WSWT 106.9 Peoria IL, KMBR 99.7 Kansas City MO, WFPG-FM 96.9 Atlantic City NJ. WHBC-FM 94.1 Canton OH, WWEZ 92.5 Cincinnati OH, KTSM-FM 99.9 El Paso TX, and possibly KESY-FM Omaha, although I am hard pressed to find much difference in their format compared to what it was. This is perhaps the month having the largest number of station defections from any one format in the history of FM-possibly surpassing the mass defections from "disco" in the late 1970s and early 1980s. Bonneville's own stations have all defected from easy listening, the most recent being KMBR Kansas City, Jim Opsitnik might start at home in persuading Bonneville itself to help preserve the beautiful music format.

#### Emerald Broadcasting Hit With More Opposition to Atlanta Move-In: Also Wants To Slide into Sacramento

Wanting to dump Carson City as a city of license (see above "Rulemakings Proposed"), Emerald Broadcating has petitioned the FCC to move its KRWR 94,7 to a town 16 km outside Sacramento. This would deprive Carson City of service in a way similar to how Emerald would move WHMA-FM 100.5 from Anniston AL to near Atlanta GA, Jacor Broadcasting, licensee of Atlanta's WPCH 94.9. said Emerald's proposal "actually undermines the Commission's allotment goals by robbing the poor to serve the rich." Also opposing the move-in was Capital Cities/ABC which said, "This is an inappropriate use of the Commission's rules and would violate the policy of providing localized service for small communities

73ily, Buce E.

# SATELLITE NEWS GEORGE W. JENSEN Baltimer, MD 21206-4220

Here we go wit h the annual review of services. This will be satellite by satellite E to W. The transponder comes first, then the service, then the encryption system - if any. Encryptions; L - Leitch, O - Oak/Orion, VC I or VCII -Video Cypher, M - any of the various MAC Systems. **SATCOM** 5 - 143 W 20 - feeds - only or 2 transponders are directed to the US 48. 24 - Alaska Satellite T.V. Project SATCOM I\_ 139 W 1 - Family Channel West - VCII 2 - KUSA - Ch. 9 Denver, Colorado VCII 4 - KCNC - Ch. 4 - Denver, Colorado VCII 5 - Pacific Sports Network VCII 6 - KMGH - Ch. 7 - Denver, Colorado VCII 7 - FNN (Financial News Net.) VCII Prime Ticket Sports, Los Angeles, Cal. VCII 8 - NBC Feeds L Occ. This now seems to be primarily used for promotional feeds, etc. 9 - Sports Channel - Los Angeles VCII 10 - Hit Video USA - AM's Home Sports Entertainment VCII 11 - Sunshine Network VCII 12 = KUBD - Ch.59 - Denver, Colorado AM's KRMA - Ch. 6 - Denver, Colorado VCII 14 - KWGN - Ch. 2 - Denver, Colorado VCII 17 - PSN sports feeds 20 - WGN - Ch. 9 - Chicago, Illinois VCII (full feed) 24 - Prime Network (Sports) VCII GALAXY I - 134 W 1 - Comedy Channel VCII 2 - Nashville Network VCII 3 - WGN - Ch. 9- Chicago, Illinois VCII 4 - Disney Channel East VCII 5 - Showtime - East VCII 6 - ESPN - Blackout Channel VCII 7 - CNN VCII 8 - CNN Headline News VCII 9 - ESPN VCII 10 - The Movie Channel - East VCII 11 - The Family Channel - EaST VCII 12 - Arts andEntertainment VCII 13 - Country Music TV 14 - The Movie Channel - West VCII 15 - WOR - Ch. 9 - New York, New York VCII 16 - Showtime - West VCII 17 - Inspiration Network 18 - TBS (WTBS) Superstation (Ch. 17) Atlanta, Georgia VCII 19 - Cinemax - East VCII 20 - Galavision 21 - USA Network - East VCII 22 - Discovery Channel VCII 23 - HBO (Home Box Office) - East VCII

24 - Disney Channel - West VCII

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2 - The Learning Channel - proposed VCII
3 - Trinity Broadcasting
 4 - AM Commercial Programmings (Incredible Inventions)
    PM - RAI USA - relay of RAI network Rome, Italy
    Evenings (8PM) - Bravo VCII
5 - VISN - Vision Inter-Faith
 6 - CNBC Business Channel
7 - Univision (Spanish Network)
8 - J. C. Penny Shopping Channel
10 - USA Network - WEST VCII
11 - FNN VCII
12 - AVN Shopping AM's
     American Movie Classics PM's
13 - HBO - West VCII
14 - TCI CableVision Program Guide VCII
15 - E! - Entertainment TV
16 - The Travel Channel
17 - Lifetime West VCII
18 - TNT - Turner Network Television VCII
19 - Request TV I VCII
20 - BET - Black Entertainment Television
21 - FAILED TRANSPONDER
22 - Home Shopping Club II
23 - Cinemax - WEST VCII
24 - Request TV II VCII
ASC I - 128 W
No video on C Band at this time - has been in the past.
On the Ku side there are 2 MAC feeds and in busy periods
of times (Elections) - there may be some news feeds.
TELSTAR III - 125 W
18 - Fox Feeds
20 - TVN Feeds MAC?
23 - FOX Feeds
24 - TVN Promo Channel
perhaps as many as 17 transponders may be given over to
TVN by end of the year
SBS 5 - 123 W - Ku ONLY
Varies from news feeds to teleconferences
MAC system used frequently on Teleconferences
WESTAR 5 - 122.5 W
1 - CNN Feeds
2 - Dr. EuGene Scott University Network
3 - CNN Headline News Feeds
4 - NCTV - National College TV (Midnight - 6AM)
15 - Sports Channel - Bay Area (San Francisco) VCII P
18 - Group W feeds - Pittsburgh
20 - Midwest Sports Channel - Minneapolis, Minnesota VCII
22 - Caribbean Superstation (occasional)
any other transponder could be used for any number of other
feeds
SPACENET I - 120 W
On the Ku side - Several MAC feeds
Gannett News Service
On the C-side
4 - Univision feeds
11 - Hospital Satellite Network 0
17 - No Video here - but carrier for many audio sub-carriers
21 - BTN - Baptist Television Network - O occasionally
    Satellite Market USA - evenings
23 - 3 Angels (religious)
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SATCOM 3 - 131 W

ANIK C3 - 117.5 W - Ku only NO LONGER IN USE except possibly for rare feeds. MORELOS - M2 - 116.5 W 2 - XHST - Trecevision - Ch. 13 - Merida, Yucatan, Mexico 3 - XEWT - Telemax - Ch6 - Hermosillo, Sonora, Mexico 8 - ITESM Campus - Educational - Monterrey, Nuevo Leon, Mexico 10 - occasional feeds No Ku transmissions noted at this location MORELOS - M1 - 113,5 W 2 - XHIMT - Imevision - Ch. 7 Mexico City 5 - UnID'd 7 - XHTV - Mexico City listed by some sources. 8 - XHDF - Imevision - Ch. 13 - Mexico City 9 - ???? - SuperCanal - Televisa Operation - Mexico City?? 10 - XHGC - Ch. 5 - Mexico City 11 - MultiDeporte - ESPN feeds and others 14 - XEW - Ch. 2 - Mexico City 21 - XHLQR - Ch. 7 - Chetumal, Quintana Roo 23 - XEIPN - Ch. 11 - Mexico City Ku - XHIMT uses occ. 1 of the 4 Ku transponders ANIK D2 - 110.5 W 7 - Feeds noted 11 - Weather Now 12 - CTV Network L 15 - Musique Plus AM'S Vision (religious) PM'S

16 - CTV Network L 17 - Canal 5 Europe (Quebec Outlet) 20 - Canada HomeShopping Channel 22 - First Choice - The MovieNetwork VC2 23 - CBC World News Channel 0 24 - CTV Network L

ANIK C2 - 110 W Ku only Various News and sports feeds CBC World News as on D2 - but in the clear - occasionally

ANIK - C1 - 107.5 W - Ku only 2 - Musique Plus 4 - ASN - Atlantic Satellite Network 6 - Super Ecran VC2 8 - TOR - Teleport - misc. feeds 10 - Radio Quebec 12 - Ouatre Saisons 14 - Canal Famille VC2 8PM - Chinese programming 16 - ROS - Sports Channel - French VC2 18 - TV Ontario - French 20 - TV Ontario - English 24 - Ontario Legislature 26 - YTV -28 - Family Channel VC2

G-STAR 2 - 105 W Ku only Used primarily for news feeds and teleconferences

ANIK D1 - 104.5 W. 1 - SCPC Radio feeds 2 - TSN - The Sports Network 0 4 - Global Network feeds 5 - feeds 6 - MuchMusic 7 - Newfoundland CBC feeds 8 - CHCH - Chll - Hamilton, Ontario O 9 - WDIV - Ch4 - Detroit, Michigan O 10 - WXYZ - Ch7 - Detroit, Michigan O 11 - CBC North (Pacific - Yukon) feeds 14 - TCTV (CFTM call noted) - Montreal, Quebec O 15 - CBC French Network 16 - House of Commons - French 17 - CBC Newfoundland/Labrador feeds 18 - CITV - Ch13 - Edmonton, Alberta 0 19 - CBC North (Atlantic/NWT) 20 - CBMT - CH6 - Montreal, Quebec (English) 21 - WTVS - Ch56 - Detroit, Michigan O 22 - BCTV (CHAN - Ch8) - Cancouver, British Columbia O 23 - WJBK - CH2 - Detroit, Michigan 0 24 - House of Commons - English G-STAR 1 103 W Ku only used generally for news feeds the following also use this bird regularly Colorado State University National Technological University Hospital Satellite Network 0 SBS 1 - 99 W Ku only - INACTIVE WESTAR 4 - 99 W 6 - Shepherd's Chapel National Christian Network 9 - KIN - Keystone Inspiration Network Red Lion, Penn. 10 - CNN Feeds 11 - Sky Store PBS - D has recently used this XPDR VC2 15 - PBS - A VC2 17 - PBS - B VC2 occ. 18 - ABC New York 21 - PBS - C VC2 Occ. 23 - PBS - D VC2 Occ. Many other XPDR's used for CNN and other feeds At least 1 XPDR reserved for SCPC. SBS 2 - 97 W Ku only - INACTIVE TELSTAR 301 - 96 W 2 -CBS VCI 3 - Warner Brothers feeds 4 - ABC West 6 - ABC feeds 7 - CBS EaST VCI 9 - Warner Brothers feeds 10 - ABC East 11 - ABC Feeds 12 - ABC EaST 15 - CBS feeds VCI In general almost every other transponder on this bird is used for syndicated or other programming feeds. Those listed above are relatively stable. SBS 3 - 95 W Ku only

This uses 10 split transponders 1 - Feeds 3 - HI-NET Communications (Holiday Inns) MAC

4 - Feeds

14

5 - Hi-New MAC
6 - HI\_Net MAC
7 - Conus News Feeds - Minneapolis, Minnesota
8 9 - Hi-Net MAC
10 - American Law Network
4 items are programmed on the Hi-New feeds - CNN, TBS, Showtime, Satellite Cinema

GALAXY 3 - 95 W

2 - ESPN Blackout Channel VC2 5 - Cable Video Store (Par-Per-View) VC2 8 - Home Shopping Club 9 - QVC Shopping Network 10 - EWTN - Eternal Word 11 - Mind Extention University 12 - Nu-Star Cable Previews 13 - Weather Channel VC2 14 - C-Span II - U. S. Senate 15 - VH-I - Video Hits I VC2 16 - Viewers Choice II Pay-Per-View VC2 17 - MTV - East VC2 18 - MTV - West VC2 19 - Nickelodeon/Nick-At-Night - East VC2 20 - Lifetime West VC2 21 - Viewers Choice Pay-Per-View VC2 22 - Nickelodeon/Nick-At-Night - West VC2 23 - Ha! 24 - C-Span I - House of Representatives

G-STAR 3 Ku only - 93 W - NON-Stationary This is in a pseudo-geostationary orbid with a N/S drift - I have seen no video though I have heard that there is a test card somewhere.

SBS-4 - 91 W Ku only

The 10 transponders of this bird are used mainly for data services, news feeds and teleconferences.

 $\frac{\text{WESTAR 3}}{\text{see it listed here}}$  - Thactive - the last time you will

SPACENET 3 - 87 W Ku and C
3 - WSBK - ch38 - Boston, Massachusetts VC2
5 - KTVT - Ch11 - Dallas, Texas VC2'
9 - WPIX - Ch11 - New York, New York VC2
15 - KTLA - CH5 - Los Angeles, California VC2
16 - Shop-At-Home occ.
17 - feeds
18 - Commercial Programming e.g. - Incredible Inventions
19 - Starion Premier Cinema VC2
20 - Commercial Programming as XPDR 18
21 - PASS VC2
23 - Home Team Sports - Baltimore/Washington VC2
On the Ku side - mainly occasional sports feeds, etc.

RCA/GE K1 - Ku only - 85 West
Except for an occasional news or sports feed this bird is not being used - is expected to be used for a Satellite Pay TV service sponsored by among others Rupert Murdoch of European Sky Channel fame

TELSTAR 302 - 85 W 7 - CBS fwwds - L 10 - ABC West 11 - ABC feeds occasionally 13 - feeds 14 - feeds 15 - CBS East L 16 - CBS West L 18 - CBS L 20 - CBS L 21 - Feeds SATCOM 4 - 82 W 1 - Sports Channel - Cincinnati, Ohio 2 - Sports News Network 3 - Sports Channel - Philadelphia, Pennsylvania 4 - Guest Cinema - for hotels - VC2 5 - Family Network 6 - Madison Square Garden Network VC2 7 - Sports Channel - New York 8 - Program Guide 9 - A V N Shopping/Sports Channel - Chicago, Illinois 10 - National College Television - Days - Sports Channel Plus 11 - Sports Channel America 12 - Rainbow PPV - MAC 13 - N E S N - New England Sports Network - Boston 14 - Sports Channel - Florida 15 - Shop At Home/Silent Network 16 - Sports Channel - Ohio 17 - Miscellaneous Retail Product programs 18 - Guest Cinema II for hotels VC2 19 - ICT Test Channel - Digital Subscription Music Channels 20 - International Channel 21 - Nostalgia Channel 23 - Sports Channel - New England 24 - Playboy-At-Night RCA K2 - Ku only 81 W There are 16 transponders which may be split to make 32 6 of these are used by NBC Cycle Sat uses 1 to feed news feeds and other items A T & T uses one using MAC systemINDX Financial News uses 1 Eastern Washington University uses 1 A Chinese programmer uses 1 in the evenings GALAXY 2 - 74 W 1 - CNN New York feeds 4 - CNN Los Angeles feeds 5 - CNN New York feeds 10 - West Virginia Educational Network Much of what is on this bird consist of sports feeds in almost every imaginable scrambling format you can think of SATCOM 2 - 72 W 2 - WBBM - ch2 - Chicago, Illinois VC2 4 - WABC - Ch7 - New York, New York VC2 7 - All News Channel 11 - Home Shopping Club Spree 12 - WXIA - Chll - Atlanta, Georgia VC2 13 - NASA Select TV - Goddard Space Flight Center (5) cops - NASA is also on this transponder occasionally 20 - International News Feeds (PAL, SECAM, NTSC) occ. 21 - JISO and other feeds (japanese news agency) 22 - Armed Forces Radio/Television Service MAC 23 - Feeds 24 - Globo Network Brazil feeds and others

SPACENET 2 - C and Ku 1 - Drive In Pay Per View VC2 2 - Nebraska Educational Television Network 3 - Rendezvous PPV 4 - Nebraska ETV Classroom feeds 5 - Channel America 7 - Telemundo Feeds 9 - Telemundo Network 10 - ECO/Galavision News Service 14 - SCOLA Test Channel 16 - SCOLA primary channel 19 - KBL Sports Channel VC2 21 - United States Information Agency/World Net on the Ku side: Florida News Network Tie-In educational Network 0 United Press South Kentucky ETV Feeds

BRAZILSAT 65 - not viewable from this location Services reportedly carried -TV Globo TV Bandeirantes Rede Manchete World New Embratel Network all of these are in the PAL color format

INTELSAT - 53 W C and Ku (VB F 13) 11V - France Relays in PAL, SECAM and NTSC 14V - ITC/BBC feeds 16V - IDB European feeds and others incl CNN London Not visible due to spot beam from this location are at least 3 channels for Argentina CH7 and 13) and CH 7 = TV Peru Have not seen video on Ku, but have seen data transmissions Morocco and Portugal also use East Spot beams 1 XPDR each PANAMSAT - C and Ku - 45 W 6 transponders on Ku may be split to make 12 feeds have been noted on 5 with a hybrid English/ Spanish CNN on 15 The C band is too weak usually here to get positive ID's, but 2 - feeds 9 - video seen 12 - BrightStar feeds/Telemundo 21 - ESPN in MAC which used to be on Ku

INTELSAT - 34.5 W (V F 4) has Ku but is technically kaput TVE Spain uses 2 East beam transponders to relay to the Canary Islands 23/24 - uses a combo of split and full transponders for news and sports feeds Westward

INTELSAT - 27.5 W ((VA F11) C and Ku 1 - TVE's Canal America - Madrid, Spain NTSC 3 - being used at writing for Televisa World Cut feeds in PAL 7 - feeds from Bogota, Colombia NTSC color 8 - Televen - CH10 - Caracas, Venezuela NTSC 9 - BrightStar - news feeds 10 - SuperCanal V - CH5 - Caracas, Venezuela NTSC 11 - NBC London to US in NTSC NTSC 14 - ABC London feeds to US 18 - USIA/WorldNet = NTSC 22 - Unknown MAC Others such as Libya use this bird for programming, but not directed to the US.

On the Ku side all services are directed to Europe and include:
BBC TV Europe
Children's Channel
CNN International
Discovery Channel
KindernetSFSucce
SIS Satellite Racing

INTELSAT VI F2 - 24.5 W C and KU
Newly position here after testing
Was used for feeds from Malta/Colombia/Panama with good results at former position seen here.
No Ku in use at this time.

INTELSAT V F2 - 21.5 W C and Ku No apparent usage yet on C News feeds possible on the Ku side

One transponder is used for International News Feeds Ku is spotted to Europe and is used mostly by Italy

GORIZONT 15 C and Ku 14 W (Statsionar 4)
Transmits Program I in SECAM color
other transponders used for OIRT/Intersputnik
News Feeds and Programs such as Cubavision from
Havana, Cuba (XPDR 6)
Ku is 1 transponder directed to Europe

GORIZONT 12 - 11 West (Statsionar 11) C and Ku
No Ku noted.
Noted some time ago on XPDR 8 was Moscow/Program II
in SECAM Color. News feeds have also been noted.
Both Gorizonts have a N/S bounce which makes them visible
for only parts of each day unless you can track them

ADDENDUM
Satcom 1 XPDR 22 - Satellite Telecommunication
Educational Programming and A sports Channel
(NW) in the evenings.
Shop At Home is still transponder hopping was last
noted on Spacenet 3 XPDR 11 in addition to Satcom 4 feed.
PLEASE LET ME KNOW OF ANYTHING MISSING OR NEW THAT YOU
COME ACROSS IN YOUR VIEWINGS

 $\overline{\mbox{73's}}$  until next time when  $\overline{\mbox{1'1}}\mbox{1}$  do a rundown of the Audio Subcarriers.

#### BULLETIN

that way.

Galaxy 2 - XPDR 11 - DOD (Department of Defence) Saudi Arabia
This is uplinking to the US all kinds of feeds for
the networks and others from the military positions
on the shore of the Persian Gulf in Saudi Arabia.

Galaxy 2 XPDR 7 - CNN cintinuous feed from Cairo, Egypt. Satcom 2 - various transponders - are being to relay local transmissions from Amman, Jordon, Iraqi TV, Israeli TV, Saudi TV via Arabsat and other sources. Most are converted to NTSC format.

Look at Galaxy 2 and Satcom 2 for feeds from the Persian Gulf crisis area.

Satcom 2 XPDR 18 - LT 82 - Santa Fe, Argentina in PAL format - originating feeds for Basketball Tournament in Argentina.

That's it for now.

## EASTERN TV-DX

Bill Nienajadly PO BOX 2999 Clifton NJ 07015-2999

September 1990

Cut-off July 1st 1990

Deadline October 1st 1990

High band skip positivly ID-ed! Bob Seybold on July 8th, logged CH 7 WJCT Jacksonville FL and two others above ch 6. Greg Coniglio reports from Ocean City MD with tropo galore. Overall ES and trops seemed to be in abundance for all. As for July 4th, it was trop not ES that was productive for William Hepburn in ON who logged WABC-7 Tr at 345 miles.

Bob Seybold 10567 Bennett Road Dunkirk NY 14048

There has been a lot of DX lately so I will turn in a report now before it gets too large. E-skip has been in nearly every day since late June with some super openings including double hop and high band skip. There has been some trops, nothing super but good.

- June 29- Huge E-skip opening with double hop into Soutren Texas, New Mexico and Arizona, nearly every low-band station in in Texas was in at one time or another. Opening ran 0900-2200 or later with only breif breaks Covered Florida, Gulf states, Texas, Oklahoma, Kansas, New Mexico, Arizona. Some stations seen: Miami 2,4,6, Daytona Beach 2 Baton Rouge 2 New Orleans 4 % 6 Dothan 4 Tampa 3 Pensacola 3 Bryan Texas 3 Shrevport 3 Lafayette 3 Wichata Falls 3 % 6 Houston 2 Midland 2 San Antonio -4 Ft Worth 5 Lubbock 5 Weslaco 5 (double hop) Phoenix 3 Flagstaff 2 Dodge City 6 Beaumont TX 6 Tulsa 6 % 2 Great Bend 2 Springfield MO 3 Harrisburg III 3 (very short skip) Wichata 3 KC 4 % 5 Okla City KDUH 4 Hastings NE 5 Hard many others.
- June 30th- July 6th- E-skip nearly every day; some good trops including all night trops including most Indiana U's Chicago U's, Michigan U's; Southren Ohio U's: Northren Kentucky, Cenrtal NY State, Western and Central PA: Ontario U's.
- July 7th E-skip WBRZ-2, MEAR 3, WPBT 2, KBTX 3. Kansas and Texas low band V's mainly North & Central TX.

  Trops---Chicago, Rockland U's. Madison 15 & 27, Milwaukee 18 & 36: South Bend , Indianapolis, Ft Wayne:
  Louisville 15 (rare): Dayton, Columbus ; WICD 15: Kansas City 41 & 51, breifly in evening; Joplin 16.
- July 8th---Morming trops- Louisville; Cincinnati, Dayton: lexington, Columbus U's, Pikesville 22, Moorhead 38; Springfield 26, Newark Ohio 51: Indianapolis 20,40,59,63: South Bend U's, Ft Wayne U's: Richmond Ind 43, Bloomington 42, Owenton 52.....E-skip later-1200-2200 Huge opening HIGH BAND SKIP Panama City FL 8 (new) Jacksonville 7 (new) KAYS 7 (new).. channels 2-6 loaded-several deep -very difficult to ID went to FM. LA., AL, FL, TX, AR, GA, MO, shifting up to OK, KS, NE, MO-many low band V's seen: locals 2, -4, 7, all taken out and covered: super intense signals: FM loaded.
- July 9th E-skip strong Kansas 2, (both 3's) 4,5,6 Nebraska-KLNE-3: North Platte 2: North and South Dakota 2,3,4,5
- July 10th Trops -- Dayton 22
- July 11th E-skip 1800 on & off till 2330: Nebraska 3: Oklahoma, Kansas low band V's peaking 2100-2200- Some trops Michigan & a few Wisconsin U's; few Indiana U's in evening.

(ED Note here is another report by Bob Seybold-BN)

Another report to keep things up to date. There has been continous DX now for some time, mostly trops but some E-skip Good weather and high humidity has helped. A lot of the regulars and semi regulars have been in with good steady signal levels sometimes all day-some good into the night DX. However nothing of super distance. Will be at the convention, how about you? (Yep..I missed it again! Im moving and didn't have any time to go, next year!!!-BN)

- July 16 E-skip-Kansas, Nebraska, Dakotas, Colorado, Wyoming-evening opening, channels 2-6 strong.
- July 16-29 Some tropsin this period- FT.Wayne, South Bend U's often-Chicago on a couple of occasions- Madison U's daily. Dayton, Columbus, Nothren Kentucky, Indiana & Southren occasions mostly 0500-0900 and again 2000 and into the night.
- July 17 E-skip North-South opening- Canada low V's to Northeast Quebec, New Foundland: Moncton 2, Halifax, Rimouski in channels 2-6: also FL, LA, MS, Texas channels 2-5.
- July 18 E-skip FL, GA, LA, & KS channels 2-6 strong several hours peaking in evening.
- July 19 E-skip new Dentog Texas 2, Amarillo 2 (new to me): Houston & several TX channels 2-6 ( north, central & east TX) in strong- KS, OK, NE also in including: Lakin 3: WLBT 3, KTBS 3, WEDU 3, WEAR 3, WPBT 2 ocasionally up to channel 5 from Florida: several 4's in.
- July 20 E-skip strong- Florida V's 2-6 in also Shreveport 3, Layfayette 3, Byran Texas 3, MBRZ 2, WLBT 3, several on 4: non ID-ed; Several TX, LA, AL, GA, MS, OK, KS, low banders lasted 1400-2130 peaking in evening.

Eastern TV DX September 1990

Bob Seybold continued

July 21 E- skip 1300-1400 Oklahoma 2 & 3; others not ID-ed not a major opening. Trops-many stations in 200 mile range to west in solid all day: New Cadillac 33 in excellent: most central and northren Michigan U's strong WOMU 14, WUCM 19, Saginaw 25 & 49 super, Lansing 23 & 47, Flint 28 & 66, Manstine 21, Cadillac 27, Traverse City 7 & 29 all this in morning: Sandusky 52, Ft Wayne U's; South Bend 16, 22, 46: Indianapolis 20,40,59 Richmond 43: Lexington 36: Terre Haute 38: Ontario U's above normal : Bowling Green 27 in all day.

- July 22- Trops AM-east northeast good; Detriot, Mt Clemens, Saginaw, Lansing U's excellent: Toledo U's Sandusky U's good: new 41 noted (Huron, Sandusky Ohio area running bulletin board & such); Newark 51, Pittsburg U's Ontario U's in from many areas 15,18(2),20,22,24,28,32(2), 35 Montreal, 38,40 (London and Ottawa),42(2) 44,45,48,51,53(2),54,55(2),56,59,61,64,68 plus other regulars: Rochester U's 15,21,31,38, & 40: Syracuse 24,43,68: Plattsburgh 57(rare): Elmira U's, NMED xltr on 60(rare), Weston M.VA 5 (rare): Tennessee 39 weak.
- July 23-26 Trops on all days-Indiana, Ohio, Michigan; Rochester LPTV U's 15,38,40 in often: Watertown, Plattsburgh, Syracuse, Utica U's in often, Elmira, Norwood 18, Ontario U's to east..15,32,38,44,53,42,55,40 in often also Montreal 35. Some E-skip in this period also mostly Florida & Gulf Coast stations.
- July 27 Bref E-skip 1700-1800 WEDU-3, WPBT-2,-Otherwise good trops Ft Wayne South Bend U's: WICD 15 at times; Michigan U's strong, Toledo U's , WBGU 27-Canada U's strong-some extra.
- July 28 Trops good-Ft Wayne, South Bend U's, Chicago 26,32,38,60 breifly: Kalamazoo 52 (rare) Lansing, Flint Saginaw U's: Toledo super: WBGU 27: most Ontario U's good to excellent: Ohio 41, Mt.Clemens 38 strong Grand Rapids 17, Detriot 26, Ann Arbor 31 strong, Michigan V's strong. Thats all for now. More DX in next report.

Equipment; Zenith 9" AC-DC color: RCA 25" color (home set) 4 years old-7ft dish with 4 bay bowtie feed (my own version) 0063 Channel Master Amp. Winegard all channel antenna -0064C Channel Master amp-Quantum VHF ant, 6 element . FH-3 rotors

Christopher S. Dunne PO BOX 533 21500 Johnson St Pembroke Pines FL 33029 July 1990

15 TR 0039 W16AJ -Palm Beach//WESH 15 TR 0140 W27AE-Sebring //WT0G-44 19 ES 1100 KTV0 3 MO -COLOR! 139 miles 120 miles 120 miles

After a dry end of June for E-skip. FM/TV was OK on 7/19. CH 3 is the only decent E channel here. (Ditto here-BN) Bill, I hope for your sake you're moving out where TV DX is better. (UHF should improve a lot hopefully-BN) Too bad only 3 TV stations but a few more on FM. Take care 73's Christopher

Tom Bryant 849 Todd Preis Dr. Nashville TN 37221 (CDT)

July 1990

7	ES	1446	KFOX	3	TX	675	7	ES	1617	KTVS	3	CO	926	11	ES	2113	KSRE	6	ND	1022
		1458	KENW	3	NM	963	9	ES	1800	KOTA	3	SD	1024			2200	KDLO	3	SD	832
		1501	KVIO	6	NM	1008			1800	-2200	S	ee i	notes			2230	KOTA	3	SD	1024
		1511	KOTA	3	SD	1024			2200	KENW	3	NM	963	25	ES	2159	KBME	3	ND	1022
		1529	KSNW	3	KS	799	11	ES	2113	KBME	3	ND	1022							

Notes; This generally was a lack luster month for anything. No new adds; openings were unusally very short, and the signals quite weak. Lots of Tr most of the month, but all close-in repeats. 7/9 Would have been CK if the opening had not been so intense...started at 1800 and went nonstop to 2330 but the two repeats were all I was able to pull out of the mess. KENW was solid 2125-2320. 7/11 2nd time for KSRE. KOTA solid 1 hr. 7/25 No other activity all evening ,not even CCI on 2 just one short burst right at ID time (maybe MS?-BN) the audio was WSII -3-ILL. Maybe ??? August will be better?! (Not here for me in early August-BN)

Frank Wheeler 6589 Wattsburg Road Erie PA 16509

June 1990		
19 ES 1730 WPBT 2 FL 1110	27 ES 1700 KSNW 3 KS 962	6 ES 2203 KGAN 2 IA 598
1900 WEDU 3 FL 891	JULY 1990	8 ES 1500 KPRC 2 TX 1212
20 Tr 0950 WIXI 19 OH 305	1 ES 1158 KOTV 2 MO 797	1557 KTBS 3 LA 992
25 ES 1300 CBFT 2 QU 404	6 ES 0817 KACB 3 TX 1325	1600 KARK 4 AR 832
27 ES 0002 WBRZ 2 LA 1016		2230 KTVY 4 OK 1030
0926 KPRC 2 TX 1212	0829 WBRZ 2 LA 1016	10 ES 2328 KSNC 2 KS 1009
0930 KGBT 4 TX 1339	0930 KPRC 2 TX 1212	11 ES 2100 KNOP 2 NE 1059
1300 KWGN 2 CO 1312	0931 WLBT 3 MS 880	2220 KLBY 4 KS 962
1330 KFDX 3 TX 1144	1158 WWL 4 LA 1002	LEED NEDT THO SOL
1625 KJRH 2 OK 927	1159 KTBS 3 LA 992	

Note- Quite a coincidence on the cover of the July issue of VHF-UHF Digest. Of course my name is Frank, and my wife's name is Marge. (How about that!-BN) (Frank is looking for the address of WIXI-BN)

Ed Note; If you noticed , I spread out narrative reports so they are much easier to read. In the process I have used this smaller type, so even though the narrative reports are spread out...the space used is practically the same. This minor change comes after some comments from some members. What do you think?—BN

Eastern TV DX September 1990 John F. Combs (N4SFS) 1308 Willow branch #24 Jacksonville FL 32205

July 1 ES 1035+ "Dirty"skip to N. chs 2-6

July 4 ES 0820-1000 KUSD-2 + various unids; Tr 1900-2145 Wilmington U's; SC 19,23

July 6 ES 1054+ KUSD + unids-no time to DX 1425 Breif-KGAN-2,KIMT-3,; 2313-0000...KGAN-2, KJRH-2, KSNC-2, KIMT-3 + tents. KOET-3, KSWK-3, KSNW-3, KNOP-2.

July 7 Tr 0630-0700 WSRE-23, WFGX-35, Panama City U's+V's, West Palm Beach U's...:ES 0930-1150 KACV-2 Amarillo TX--1213, KMID-2, KIII-3, KENW-3, KTXT-5, XHRIO-2, KRIS-6, KCEN-6,+ tent. KVIO-6,;..1312-1330+ KGAN-2, KTVO-3 +unids-stuff in all afternoon but I was busy;..Tr 2240+ SC 10,13,19,25,27,35,57.

July 8 ES 1605-2035 KGAN-2, WCIA-2, WOI-5, WOWT-6, WLNS-6;...Tr 2200 Columbia U's.

July 9 ES 1350+ Definitely there on 2 & 3, but too much Trs:..Tr 1830-2100 Wilmington U's + V's; Charleston V's at best level ever: most SC U's.

July 10 Tr 2130+ SC U's

July 11 ES 1330+ KQTV-2, KMID-2, noted, but no time:...tr 2125+ Wilmington U's & V's, WZØAL Wilmington-345, WUNM-19-NC -416, WFXI-8-NC-436 super.

July 18 ES 1830-2030 KPRC-2, KJRH-2, KGAN-2, KBTX-3, KCEN-6+ at 1959, KTCA-2-St Paul MN 1191 "Twin Cities Public TV"

July 19 ES 1100-1710+ KJRH-2, KTVI-2, KGAN-2, KTVO-3, KMTV-3, KDLH-3, KDLO-3, KIMT-3, KOAA-5.

July 20 ES ? 1000-1130 Weird, diagonal CCI on WESH-2, varied Ø-10 khz CCI, like stuff I've seen to Latin America, but this seemed to peak to N.W.- no signs or evidence of any F2 activity. (UFO scatter likely..Hi!-BN)

Jeff Wolf 1131 University Blvd W Apt 701 Silver Spring MD 20902

June	1990	JULY 1990  1 ES 1100 KIMT 3 IA 853 1122 KDLO 3 SD 2159 MUF 2 2 ES 2325 KMTV 3 NE t 3 ES 0215 MUF 2 2122 CBS 2+ 2230 KDLH 3 MN 4 TR 0607+0H-16-25-28-43t +WNEO-45 0750 CCI 17z 0817 WGGT 48 NC 256 WLXI 61 NC t ES 0835 MUF 2 TR 0845 WDLI 17 OH t 0849 WRDG 16 NC 251 0925 WKFT 40 NC 265 ES 1000-1414 UNIDS 2 1424 PBS 3 TR 1518 WUND 2 NC t ES 1616 MUF 2 TR 1800 WCTI 12 NC 269 6 ES 2000 KDLH 3 MN t 2005 CUBA 3 2100 MUF 5 2130 KSNW 3 KS 1050 7 ES 0729 WPBT 2 FL 900 1430 KTBS 3 LA 983 1511 KFDX 3 TX 1225 1600 WPBT 2 FL 900 1759 MLBT 3 MS 2130 fade out 8 ES 0220 MF 2 0758 PBS 3 1105 NBC 3+ 1430 KTBS 3 LA 983 1438 NBC 6 1439 MUF 104.7 1537 MUF 4 1605 MUF 98.3 1658 MUF 5 1700 KQTV 2 M0 1806 KFDX 3 TX 1225 1608 KFDX 3 TX 1225 1608 MUF 98.3 1658 MUF 5 1700 KQTV 2 M0 1806 KFDX 3 TX 1225 1823 MUF 3	
18 tr	1805 WPTF 28 NC 251	JULY 1990	
	1857 WKFT 40 NC 265	1 ES 1100 KIMT 3 IA 853	8 TR 2012 OH 17
	2215 WYED 17 NC 248	1122 KDLO 3 SD	WNEO 45 OH
19 ES	0725-0735 MUF 2	2159 MUF 2	ES 2100 KSNW 3 KS 1050
	1827 MUF 2	2 ES 2325 KMTV 3 NE t	2116 KUSD 2 SD t
	2000 WESH 2 FL 720	3 ES 0215 MUF 2	TR 2128 WUAB 43 OH 293
	2329 f/out	2122 CBS 2+	2212 MUF 88.1
20 ES	5 0725 UNID 2z 3/4cb	2230 KDLH 3 MN	2300 KUSD 2 SD 1050
	2201 MUF 2	4 TR 0607+0H-16-25-28-43t	9 ES 0230 MUF 2
21 ES	5 0004 MUF 2	+WNEO-45	10 TR 0005 OH 43
	2145 MUF 3	0750 CCI 17z	WNEO 45t
22 ES	5 0235 MUF 3	0817 WGGT 48 NC 256	11 TR 0141+WYED 17+NC-28-40
LS	S 1800 NC16 WYED 17	WLXI 61 NC t	0240 WNET 13 NY 196
	1806 NC40 Fair to gd	ES 0835 MUF 2	0248 WCVE 23 VA t
ES	5 2115 MUF 3	TR 0845 WDLI 17 OH t	LS 1801 WKFT 40 NC 265
	2305 MUF 2	0849 WRDG 16 NC 251	ES 1805 KUSD 2 SD t
24 ES	3 1900 CUBA 3 t	0925 WKFT 40 NC 265	1826 UNID 3 SD
25 ES	5 2213 MUF 2	ES 1000-1414 UNIDs 2	12 ES 2145 NBC 3
26 ES	5 1800 WESH 2 FL t	1424 PBS 3	13 ES 1905 MUF 2
	1859 WPBT 2 FL 900	TR 1518 WUND 2 NC t	2101 "" ""
	1900 KTBS 3 LA 983	ES 1616 MUF 2	14 ES 2038 "" ""
	1927 KPRC 2 TX 1235	TR 1800 WCTI 12 NC 269	2305 "" ""
	1937 MUF 5	6 ES 2000 KDLH 3 MN t	15 ES 1053 MUF 3
	1957 KDTN 2 TX 1164	2005 CUBA 3	1115 KUSD 2 t
	2030 WMAB 2 MS t	2100 MUF 5	1950 MUF 3
	2057 KJRH 2 OK 1031	2130 KSNW 3 KS 1050	2234 "" ""
	2059 KYTV 3 MO t	7 ES 0729 WPBT 2 FL 900	16 ES 2155 MUF 3
	2240 MUF 5	1430 KTBS 3 LA 983	17 TR 2349 WYED 17 NC 248
	2305 KQTV 2 MO t	1511 KFDX 3 TX 1225	WPTF 28 NC 251
	2326 KJRH 2 OK 1031	1600 WPBT 2 FL 900	WKFT 40 NC 265
	2330 KMTV 3 NE 950	1759 WLBT 3 MS	18 ES 1900 KTBS 3 LA 983
27 E	S 0029 KUSD 2 SD 1050	2130 fade out	1958 KJRH 2 OK 1001
	0030 WLBT 3 MS	8 ES 0220 MUF 2	2104 MUF 2
	0045 KJRH 2 OK 1031	0758 PBS 3	20 ES 2123 MUF 3
	0230 KUSD 2 SD t	1105 NBC 3+	21 #0 0006.00 22 42
	0259 f/out	1430 KTBS 3 LA 983	21 WK U0U0+UN-33-43
	0411 CCI 2z	1438 NBC 6	WINEU 45 MC 46
	0743 MUF 3	1439 MUF 104.7	TD 1001 HUFT 40 NC 265
	2103 MUF 3	1537 MUF 4	TO 1105 MAC 31
T	R 2259 WYBE 35 PA 119	1605 MUF 98.3	1048 MIE 3
28 T	r 0147 WNET 13 NY 196	1658 MUF 5	1945 MUF 3
E	S 1818 KDLH 3 MN t	1700 KQTV 2 MO	24 E3 U825 MUF 2
	1820 KPRC 2 TX t	1806 KFDX 3 TX 1225	22 TD 0620 MADAU WA +
	2315 f/out	1823 MUF 3	Z3 IN UD39 W4UAH VA T

1829 KJRH 2 OK

		rn TV													Se	pte	mber	19	90		
Jo	e1	Rosen	berg	19	G1	enayr	Rd	Ric	nmo	nd Hi	11 0	nta	rio	L4B 2W3	(416	) 8	84-84	54			
Ma	y 1	990																			
27	ES	1858	UNID																		
			KAKE																		
		1959	KTVS			1230		15	Tr	0720	WGTE	30	OH	250	6	ES	0754	WKRG	5	AL	1020
			KLNE	3	NE	1055				2255	CBLN	2 3	40N	150			1958	UNID	2		
		2000	KUSD	2	SD	880					WXYZ	7	MI	210			promo	for K	-95-	FM	
28	ES	1815	PBS	2				16	Tr	1815	Roches	ter.	Syr	U's-s/f			2030	WMAB	2	MS	895
		1900	KSNC	2	KS	1070					all ev	enir	na				2100	WLBT	3	MS	985
		1917	KNOP	2	NE	1095				1818	W43?			-video jukebo	X	GW	2310				
		1918	KLBY	4	KS	1150								estown-BN)				Toro			
		2325	KJLH	2	OK	1015					W62A		NY		-					4419	
29	ES	1920				1120					-xltr				7	ES	1135		2	: 11 - 1	
2000			KBTX		TX	1165					W59A		NY				1735		2		
		2124				MHZ					xltr c							Fade			
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			WBRZ			1120					WKYC		OH	200			Roche	ster, Sy			
		1990	HOME	-	Ln	1120		20	1.1	0030	WAKC			215				W62?	?	N	6
		0735	MHE	3				25	FC	2300		2	Un	213	8	Tr	0940	Syr,	H20	town	1-sf
	LJ		WLBT		MS	985							mi	200 - 15				CIII	22	ON	200
2	Tu		WPSX					20	140	0700	WVIZ							WFMA	39	IN	345
2					PA									215-as/f			0950	WKJG			
			KUSD		SD									oungstown				WFFT			
8	Ir		W40A		NY	105			-		Detric							WKAR			
	-		ster/Ch			mertca			ES	2200		2		manava tariri				WKMR			
			WESH		FL					2300	WBRZ			1120		FS	1500				443
10	ES	0745		3							PBS	2				60		Fade			
			UNID		-re	ligion				1990					0	Tw	0800				
		1530		2				2	ES	2300	NBC	2			9	13					
14	ES	2307	KUSD	2	SD	880					CBS	3			1.7	re		WUTR			
15	Tr	0720	CIII	22	ON	200				2313	KYTV	3	MO		17	ES	2130				1300
			WAKC	23	OH	215		6	ES	0730	MUF	4			7.0		2200		10.00	TX	
			WBGH	27	OH	290				0754	KPRC	2	TX	1300	18	F2	1930		4	12	
																-215		WBRZ		LA	
No	te	#1: I	suppos	e th	ris o	counts a	s a sta	ation.	Yea	I wou'	ld sav	50-F	IN)	This was a	19	Tr	0750				
100	wat	t test	of Di	oita	1 ra	adio fro	m CN to	wer(16	mi	les) or	798	3 1	Mh	z (i e				CBOT			
														background				CBOT			
2 2	bord	30 hc	mizont.	al h	lack	k lines	One or	uld he	alc :	the bry	nadeast	at	one	station	20	ES	2330	Detr	iot	U's	210
														n a office				CBLF	T 6	8	150
						aned by						ut	et.	u office							

William R. Hepburn - 1211-1547 Mississauga Vly - Mississauga, ON L5A 3X8

Equipment: JVC HR-D630U VCR 12th floor balcons VHF discone/dipoles / indoor 4-bas UHF

- time EDT

June 1990	July 1990	4 Tr 0338 WHSP 65 NJ 370
16 Tr 0506 WKEF 22 OH 345	3 Tr 0841 WLKY 32 KY 485 \$	0343 WHSE 68 NJ 345
20 Es 2251 MUF-2	0847 WKEF 22 OH 345	0358 WPHL 17 PA 345
26 Tr 0126 W59AU 59 NY 230	0901 WKPC 15 KY 485	5 Es 1312 MUF-2 .
Utica (WCNY-24)	Es 2186 MUF-2	7 Es 1446 MUF-3
(ex-W33AB)	Tr 2216 WTJC 26 OH 340	8 Es 2135 MUF-104.9 KS/OK
0385 unid-35	2251 Daytn 22,45 345	18 Es 1838 MUF-2
(Jukebox Net)	4 Tr 0051 WLKY 32 KY 485	
Es 2200 WSAV 3 GA T	Ø318 WABC 7 NY 365	
27 Es 0050 MUF-99.3	(new VHF-hi record)	
1354 MUF-115.2	0326 WTXF 29 PA 345	

Comments: Some nice trops on the 4th. Semi-locals were below normal strength. There was a higher-level inversion associated with an approaching warm front rather than the usual low-level radiational-cooling type inversion.

Jukebox Network stations popping up everywhere. My unid 43 turns out to be WSNR Syracuse (also has xitrs WilBP & WiBAL). I expect they'll die just as 9wickly...considerin9 they charge what works out to \$50/hr to view videos. It would cheaper to hook up cable...or to buy a VCR and tape free all-night video shows such as those on WJET-24 and WAKC-23.

BENLI, Bill

30 ES 2028 MUF 2

September

1990

Greg Coniglio 5100 Glenwood Drive Williamsville NY 14221

Report #1: vaction at Ocean City, MD- about 4 miles N. of Ocean City. Equipment: Sony Watchman TV, bowtie for UHF and rabbit ears for VHF

First the skip report

June 1990

29 ES 1100 KDLH 3 MN 1033 27 ES 1237 CKPR 2 ON 988 1 ES 1100 KSNW 3 KS 1192 1601 KDLO 3 SD 1210 1101 KDL0 3 SD 1210 1101 CKPR 2 ON 988 1200 KGFE 2 ND 1278 1628 KUSD 2 SD 1170 KOTV 2(KS) 1050 29 ES 1035 KTCA 2 MN 1031

All the channels 2-6 were empty for DX, but since I was only rabbit ears, the skip was weak. Many UNIDs were seen on 2-6 but the clarity of the screen is not tto great so I hoped for voice IDs. I also saw WPBT-2 and CUBA-3 once but I forgot to write it down.

#### Vacation trops June 23- July 2

MWAR-2-MD-104..KYW-3-PA-110..WTKR-3-VA-120..WRC-4-DC-108..WMBC-4-NY-162..WTTG-5-DC-108..WPVI-6-PA-110..WTVR-6-VA-140 WJLA-7-DC-108.WABC-7-NY-162..WFXI-8-NC-265..WTNH-8-CT-230..WUSA-9-DC-108..WMOR-9-(NY)-162..WCAU-10-PA-108.WAVY-10--VA-120..WBAL-11-MD-104..WHYY-12-DE-92..WJZ-13-MD-104..WVEC-13-VA-120..WLYH-15-PA-150..WHR0-15-VA-120..WB0C-16-MD-20 WPHL-17-PA-110..WYED-17-NC-261..WUNM-19-NC-303..WDCA-20-DC-108..WTXX-20-CT-241..WLIW-21-NY-190..WHP-21-PA-150 WMPT-22-MD-85..WLFL-22-NC-265..WNUC-23-NJ-107..WCVE-23-VA-140..WHSW-24-MD-104..WTAT-24-SC-473..W25AA-VA-54 (Onancock w/WHRO-15)...Also had WPDE-15 on it one night...UNID-25-Boston? (likely-BN)..WETA-26-DC-108..WTWS-26-CT-254 WJKA-26-NC-330..WGNT-27-VA-120..WZ7AJ-DE-59 (Dover w/WMOT-47)...WCPB-28-MD-20..WPTF-28-NC-330 (with WCPB off the air) WTXF-29-PA-110..WIT-30-253..WNYC-31-NY-162..WHM-32-DC-108..WTVZ-33-VA-120..WITF-33-PA-158..WRLK-35-VA-140.. WYBE-35-PA-110..WSBE-36-RI-309..WLNP-36-NC-197..WSBK-38-MA-342 (Ed note Nice Catch !!!-BN)..WJNJ-39-NC-330..UNID-39 see note#1..WMCM-40-NJ-40..WKFT-40-NC-311..W41AC-VA-54 (Onancock w/WAVY-10)..WXTV-41-(NY)-160..WFMT-43-PA-139.. W44AD-NY-200 (Hicksville NY LPTV) (Ed note; Great catch! that little peashooter really got out!-BN) ..WBFF-45-MD-104 WMDT-47-MD-20..WNJU-47-(NY)-160 (over WMDT)..WGCB-49 PA-134..WJCB-49-VA-120t see note #2..WFTY-50-DC-108..... WNJM-50-NJ-188 Hi Bill (Ed; Wow! now Im really impressed! My 4 mile local & #1 image maker!-BN)..WTVE-51-PA-140 UNID-51 LPTV see note #3..WNJT-52-NJ-125..W52ABt a PBS other than WNJT..WEDN-53-CT-260..WNVT-53-VA-?..WNJV-54-MD-104 WLIG-55-NY-211 (Ed; Yea that one really gets out-BN)..UNID 56 Boston? Arsenio Hall 38 Boston in that night. WCBS-57 PA-110..WCW-57-VA-140..UNID-57 with WLIG (Ed note I have it listed but not at this moment-BN) WNJB-58-NJ-145 WCVX-58-MA-328..mpme CCi maybe W58AK-VA..W50AL-VA-54 Onancock w/WVEC-13..WTGI-61-DE-92..WTIC-61-CT-262..W63AM-VA-68--Craddockville w/WAYY-10..WDPB-64-DE-31 satellite of WHYY-12..WNAC-64-RI-309..WHSP-65-NJ-70..WTKK-66-VA-130,WSNL-67--NY-200..WMP8-67-MD-104..WHSE-68-NJ-160..UNID-68 could only make out "LPTV"

note#1 Thought at first it was WUNJ again, and it could have been, butthere were several mentions of New Britian CT and CT was in good at the time. A new translator up there? (Gonna check-BN)

Note#2 A religious station to the South with area code # 804 on the screen. Is this station on the air? (dunno-BN) Note #3 Ch 51 LPTV seemed to come from the south, and it was running. The Channel America Network.

Back home in Clarence:

July 1990

3 Tr 1000 WCFC 38 IL 456 WFLD 32tIL So. Bend U's & UNID 22 PBS 2350 WIHT 31 MI 257

HSN rare

4 Tr 0138 WLFI 18 IN 452 LS 2300 Binghampton and Scaranton U's 5 Tr 0912 WLLA 64 MI 355 5 Tr 0740 WAOP 49 MI 260 WNYB off air -lightining So Bend U's-398

Some TV news: WNYB 49 Buffalo is now all religious, all the time, running a lot of TBN and some TCT (Total Christain Television ) too. WUTV picked up Fox and is now Fox 29. (Just like Fox 29 in Philly-BN) In passing on the way home from Ocean City there seemed to be a TBN in Dover in the upper 60's and maybe a LPTV in Philly in the 40's (Ed note: in the 40's? That must be a new one...I'll check, Im at a freinds house typing this up-BN) could've been WMGM tho.

Also saw WGBS-57 in the 40's near Allentown. the trops here in Buffalo have been nice, but nothing like the INCREDIBLE openings openings down in Maryland. Yes, that many stations came in ABSOLUTY PERFECT with just a bow tie. i was on the 3rd floor, but even on the ground many of the stations were in . Some Dx was so strong that is was stronger than the locals, snowfree in every direction Ipointed the bowtie, even if I dropped it on the floor. I have NEVER seen anything like that in Buffalo, evn with Toronto or Rochester: under 60 miles. Also, the trop seemed to happen when there was LESS humidity instead of more, and started going quite early in the afternoon, with the sun still high in the sky. And maybe can explain this; We had a heavy thunderstorm, and I happend to put on the radio, and there was strong trop within 100 miles. Any ideas? (Ed note; Rapid inversions enhanced by the ocean?-BN) Good article by Joop J Prosee on propagation-enjoyed it very much. (So did I-BN). 73 Greg

Note from the editor: Im sorry if I didn't get to do up another page of reports, I do have more but this month I'm moving and unfortunatly didn't have the time for it. However next month I'll have all the time in the world and what ever was held back this month will be in next month's column. Sorry and Thank for your understanding-BN

Fred McCormack Box 9077 Prairiewood Station Fargo, ND 58106-9077

September 1990

Deadline: 10-11-90 Cut-off: 07-01-90

CORRECTIONS - In the July column, Bill Draeb's logging on May 27th at 2330 should have read KIDK 3 ID, not (WA). Thanks to careful reader Tom Bryant for catching this one. In the August column Doug Smith's logging of W68BR on May 31st at 0800 should have indicated the primary as WCFC-38, not WCIU-26.

Now on to the DX!

New Mode\_ \_ Tent. - t Unidentified - unid S/On - + S/off - = ID Color Bars - @ Unid Color Bars - % Misc. Test Patterns - & MTS Stereo - \$ Parallel Programming - //

BN Baja California Norte

CH Chihuahua

NL Nuevo Leon

7A Zacatecas

ES El Salvador

SI Sinaloa

Christopher W. Hanley, 1321 Beecher Avenue, Galesburg IL 61401

CDT

Guten tag. Here's the DX for the period of June 16 - July 15. My TV was rarely off for the first eleven days of July. Mixed in with the unids, fade outs, and assorted disappointments were several new stations. I love summer! So here it is - no relogs under 260 km (161 miles) (up from 250 km as I discovered that excluded some Chicago stations but included others).

Jui	ne	1990					2	tr	0630	KNLC	24	MO	179	3	tr	2201	WLUK	11	WI	267
18	tr	0540	WHSL	46	(MO)	170			0633	WFIE	14	(KY)	261			2245	MHO	13	IA	178
		0542	KDNL	30	MO	164			0635	WEVV	441	(KY)	258	6	tr	2202	WHO	13	IA	178
21	tr	0624	KDIN	11	IA	178			0640	WMVT	36	WI	195	7	Es	1406	WESH	2	FL	973
25	tr	0608	WHSL	46	(MO)	170			0642	WTCT	27	IL	245			1438	WESH	2	AZ	1217
	Es	1659	CKCK	2	SK	942			2007	WIIB	63	IN	247	8	Es	1428	WEDU	3	FL	1013
		2205	KNAZ	2	AZ	1217			2010	WHMB	40	IN	231			1437	WFMYt	2	NC	
26	Es	1959	WPBT	2	FL	1186			2100	WPNE	38	WI	267			1445	WPBT	2	FL	1186
		2221	WESH	2	FL	973				KMCI	38	KS	291			2125	WFSB	3	CT	910
28	Es	1800	KMID	2	TX	898				(State	e #:	24)		11	Es	1630	KDTN	2	TX	680
		1806	KENS	5	TX	919			2159	WGBA	26	WI	264			1632	KPRC	2	TX	836
		1814	KIII	3	TX	1004			2214	KDNL	30	MO	164			1645	KIII	3	TX	1004
		1815	KPRC	2	TX	836			2216	WHSL	46	(MO)	170			2158	KWGN	2	CO	785
							3	tr	2118	WPNE	38	WI	267			2201	WBRZ	2	LA	736
Ju	1y	1990								WHSL	46	(MO)	267			2222	KSNC	2	KS	478
1	tr	2245	WHSL	46	(MO)	170			2133	WFRV	5	WI	267				(Shor	tes	t E	s)
		2246	KDNL	30	MO	164				WGBAt	26	WI		13	Es	2358	KNAZ	2	AZ	1217
2	tr	0630	KPLR	11	MO	168			2159	WBAY	2	WI	267							

Log now stands at 143 stations. Kansas becomes my first state logged with both tropo and E skip. (Both stations were received while I was looking for something else!) God bless and 73's

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

CDT

Equipment: See July 1990 Western TV-DX

July 1990	2 tr 0612 WKON 52 KY 437	3 tr 0008 WBNA 21 KY 437
1 tr 0605 KOCR 28 IA 268	CBLFT23 16 ON270	0535 WYMT 57 KY 554
Es 1845 KCWCt 4 WY	2335 K58BX 58 IA 265	(Snow free)
unid channel 2	(Davenport TBN)	W47AB 47 OH
1940 unid channel 3	2340 WHSL 46(MO) 432	(Mansfield WOSU-34)
2000 KOUS 4 MT	WFIE 14(KY) 420	W47AZ 47 IN 336
KYUSt 3 MT	2354 WEIU 51 IL	(Indianapolis VJN)
2 tr 0530 @WTCT 27 IL	2359 K58BS 58 MN 280	0555 WFIE 14(KY) 420
0538 @WCCU 27 IL 300	(Minneapolis TBN)	WCET 48 OH 400
KDNL 30 MO 432	3 tr 0000 = WDKY 56 KY 514	KDNL 30 MO 432
KNLC 24 MO 432	WKGBt 53 KY	WXMT 30 TN 585
0600 WDRB 41(IN) 437	0004 W34AY 34 IL 300	(Home Shpg Club)
0612 WCET 48 OH 400	(Champaign TBN)	0610 @WAAY 31 AL 685

Wi	11	iam	Dra	WKHAA  WWKHAA  WWENA  WWEYV  WAFF  WEIU  WKGB  WKGB  WKUN  WKUN  WKUN  WUJU  WKUN  WUJU  WKUN  WHIII  WLJCt  WHIII  WLJCt  WHIII  WLJCt  WHIII  WLJCt  WHIII  WLJCt  WHAD  WHA	inued	)_	7	tr	1959	WIII	64	OH	400	13	tr	2029	WCET	48	OH	400
						2000000		ES	2010	MCRDE	2	50	107				MC/VA+	51	KV	3.4.
3	t	r 0	610	@WKHA	35 KY	554		tr	2010	WKMJ	68(	(IN)	431			OOFF	VVTO	2	NIM	
				WDRB 4	41(IN)	437				(Snow	Tre	3e-20	)55)		ES	2055	KAD A	-	A/A/	
				@WEVV 4	44(KY)	420			2024	WGRB	34	KY	499			2113	KOB C	4	INM	
				WAFF	48 AL	685				(Cinc	inna	ati E	3B )				KWABt	4	IX	
				WETL	51 IL				2038	WPBO	42	OH	462				KMID	2	TX	
				MKGB (	53 KV	553				WOSU	34	OH	395			2210	KDBCt	4	TX	
				(Full )	color	har)			2040	WEMT	39	TN	613				KENW	3	NM	
				(FUIII	E 4 AI	605			2101	WKCH+	12	TN	10000				KACV	2	TX	
				WZDX	54 AL	000			2101	WOUND	5.4	VV	407			2235	KAMR	4	TX	
				MCAN	54 KY	407				MCVIN	24	KI	401			2240	KEDY+	2	TX	
				WIII	64 OH	400				WIVUE	30	KY	500			2240	KCMK+	9	VC	
		0	0616	WLJCt	65 KY				2129	WKSO	29	KY	538			2240	NOWNE	,	11 -	
		(	0618	WFLIt	53(GA)					WKHA	35	KY	554		-		E SK1	p a	11 9	one
				WPBYt	33 WV					WKON	52	KY	437	14	Es	2015	KIDK	3	TD	
				WOSII	34 OH	395			2153	WKPC	15	(IN)	437			2033	KCWCt	4	WY	
				MDKA	SE KV	(25)(E)			2215	WMSYt	52	VA				2145	WGBH	2	MA	830
				WILL	26 KV	472				WVMT	57	KY	554			2210	WBZ	4	MA	830
				MIAG	COLLIN	413				( WKY	T-2	7 No	we )				CBHTt	3	NS	
			0830	WKMJ	98(IN)	431			4745	WTTT.	2	TV	1285			2215	WCVB	5	AM	830
				Iron M	th UHF	S	0	ES	1715	KILL	0	(11)	1200			2210	WINE	. 6	(PT	
				snow f	ree of	f			1/25	WEAR	- 3	(AL)				0000	HLITE C		HE	3
				back o	f dish				2030	unids	ch	S 2-	6 S			2220	WLBZ	2	OT	770
				WBNA	21 KY	437			2122	WLBT	3	MS	865				WESB	3	CI	116
			1228	CITTA1	41 ON	410		tr	2122	KWWL	7	IA				2225	WNBCt	4	NY	
				CEMT	AT ON	410		111557	2711/18/25	KCRG	9	IA				2228	WCBSt	: 2	NY	
				WNVD	AO NV	445				(Both	sn	ow f	ree)			2313	E ski	pa	11 9	one
				WINTE	45 141	IAOD)				KOCE	20	TA	268	15	Fe	1104	unide	ch	s 3.	5
				(ShwTr	ee o/w	IAGP)				(Much	20	akar	1	1.9			KMTO	. 3	TX	-
				WUTV	29 NY	445	5.3		organ.	(Mucr	) we	aker	7.			1120	Eaki		11	none
				WNED	17 NY	445	9	Es	1804	KDFW	- 4	I X				1130	E SK	h a	111	10116
				WNEQt	23 NY					KDTN	t a	? TX				2110	unia	cna	inne	2
			1250	WNEO	45 OH	405			1811	WESH	2	FL		17	Es	2126	KACVI	. 2	TX	
				WEAG	49 OH	380			1826	E sk	ip a	111 0	one			2159	KFDX	3	1 TX	
			1051	WOOU	52 DA	000			2130	KGNC	t d	4 TX	2011/2015-1	18	tr	0828	WUSI	16	IL	402
			125	WPGHL	53 PM				2100	KACV	4	2 TY			Fs	1719	WCBD	2	SC	
				WGLNT	54 PA		2.7			ODIN	5 00	ON	205		-		WESH	F 3	FI	
			2350	W62BU	62 IL	1/0	10	tr	U445	CBLM	0 21	NO C	305				unid	che	nna	1 4
			(Ro	ckford	WWT	0-35)				WSEE	3	D PA	405			4700	WCD	UIIC	OA	760
	4	tr	0000	) WTJRt	16 IL				1920	WPBO	42	5 OH	462			1728	M2B	. 6	. UA	100
			000	6 K58BX	58 IA					WOSU	34	4 OH	395			1745	WIVJ	E 4	# FL	
		Fe	090	unids	chs 2	-4 W			2052	WGGN	52	HO S				1749	WSAV	3	3 GA	972
		+ -	100	O KIMI	3 TA	300				WKON	5	2 KY	437			1750	WUFT	t	5 FL	
		U	120	(Cnow	frank	000		Fe	2111	unid	ch	2 W	est.			1758	WJXT	t i	4 FL	
				(SHOW	co Ti	470	4		0740	CRCE	1	S ON				1826	WBRZ	1	LA	1002
			214	0 MRRR	98 IL	170	1	1 61	0740	KDDC		4 TV	1055			1828	WEDLI	- 3	3 FI	1192
			(Ro	ckford	WCF	C-38)		ES	1230	KDRC		4 1 1	1333			1020	WDDT		) FL	1268
				(CCI	from W	68BS)				XEPM	L	2 CH	10000				WFDI	2 4	0 14	1300
				W62BU	62 IL	170			1530	KIII	8	3 TX	1285			1930	KAIC	Ε,	3 LA	
				(Snow	free)				1630	unid	ch	3 M	exico				WWL	τ .	4 LA	
				W33AR	33 IL	170			1716	KDFW	1	4 TX				2030	) Almo	st a	all	gone
			(Do	ckford	WCT	11-26)				KDTN		2 TX		11	e t	0648	3 W33A	R 3	3 IL	
	-		000	CKIUIU	0 EI	0 20)				KYAS	:+	5 TX					W62B	U 6	2 IL	
	0	ES	203	U WEST	4 51				1720	VWAD		A TY					W68B	R 6	8 IL	
			V8183	WJXI	4 FL				1730	LAMP	A N	7 10	1 del				CRLN	5 2	O ON	305
			203	5 WCBDt	2 50	į.				(un	a W	A5 S	(lue)				(Cra	2 6	rani	000
				WSAVt	3 G/	1				KMID	J	2 1X	6				(200	# 1	( 66)	i
		tn	203	5 W40AK	40 MI	115			1736	KTXT	t	5 TX	F)				CREM	4	U UN	
			(MI	skegon		CHA)			1748	KFDX	(t	3 TX	8				CBLN	4 4	5 ON	on the con-
		Ec	204	5 WWAV	3 NC	( Control of the Cont			1750	KENW	1	3 NM	ĺ.				CICA	51	51 0	N 305
		+5	204	O WADDO	42 OL	1 460			1756	KACI	/t	2 TX	ě			0704	4 CBLN	2 3	4 ON	i.
		LI	200	WPBU	42 01	1 402			2000	V IDL	,	2 08	725		E	c 121	5 KRIS		6 TX	1285
				WCEI	48 UF	400			2000	/ C		at a	# 1 1		6	- 15.13	KITI		3 TY	1285
		Es	205	5 WEDU	3 FL	. 1192			10000000	( 56	e N	ote	# 1 )				MINDO		5 M	1200
			210	O KATC	3 LA	1026			2015	KBME		3 ND	000			2222	WARE		O AL	E-HAY
			210	6 WLBT	t 3 MS	S				KXMA	4t	2 NE	)			1300	U-1315	(58	e No	ite#2)
				WBRZ1	t 2 L	4			2023	KWSE		4 ND	811	2	0 t	r 200	8 W23A	T 2	3 IL	195
		tr	211	n WKON	52 KY	437			2025	KCW	Ct	4 W)	/			(Moi	kena			(NLV
		61	- 401	MUDD	A1/TE	1) 427				KTW	Ot	2 W	4			150103	( Se	e N	ote	# 3 )
		-		MUKB	41/11	1 431			2200	KEN	N .	3 NA	4		Е	\$ 213	7 unic	5 2	. 3	5 s
	1	ES	134	to unida	s cns	-4 S			2200	KENY	O+	0 7	v			215	6 WIDT		3 MC	865
			14	12 KBTX	3 T	4			2201	KMI	UL	2 1/	,			210	O WATE	8 1	2 11	1006
			142	29 WLBT	3 MS	865			2209	(KFD)		3 1)	V22 222=			220	U KAIL		JLA	1020
			15	55 KDBC	4 T	X 1355	1	2 t	r 2005	WDR	B 4	11(IN	() 437			000 0002000	WBR.	, C	2 L/	4
		tr	19	59 WXIX	19(0)	4) 400				WPBO	0 4	12 OF	462	2	1 1	r 182	7 WDRE	4	1(1)	() 437
				WDRR	41(T)	N) 437		63		WCE	Γ 4	18 OF	4 400				WCET	4	18 OF	4 400
				MORE	49 0	4 400	4	3 +	r 0555	CRO	Ē i	16 ON	V		E	s 210	5 unio	1 ch	1 2+	south
				MCEI	40 0	400	1	0.0		1690		4 41	0			e - m.65	ow West 100	100000	0.0000	

#### William Draeb (continued)

Note # 1 - 07/11 @ 2000 - KJRH-2. Same style "2" as WESH. Good thing "Tulsa" was on screen next to it.

Note # 2 - 07/19 € 1300 - Channel 2. Tone with no video. At 1315, full color bars with tone which lasted until 1354. It turned out to be WDIQ. I thought I had Cuba or Mexico or something; what a disappointment!

Note # 3 - 07/20 @ 2008 - W23AT. Nearly snow free. Mokena is about 10 mile east of Joliet. ID slide shown at 2111 and 2112. No Morse code ID noted.

On July 18th (and other times), I got Iron Mountain, Michigan translators good and I noted WLUK-11 on channel 43 (as I have in the past). (In the November 1989 column, I reported my observation of channel 43 carrying WDIV-4. fm).

I don't know when W23AT began operations. I ran across them on July 20th with a nearly snow free picture. They seem to be running about the same power as the one in Waukegon, Illinois. I had to wait over an hour before the ID slide showed up. Then I had to figure out where Moneka was. Another thorn in the ---.

In going over the old VUD's to update my totals, I realized that W42AF (SelecTV) in Ripon isn't on anymore. When did they go dark?

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

(Bill, I wonder if the same thing happened at Iron Mountain as happened at Champion. According to a report in the February 1990 Television News column, WDIV forced the operators of a translator there to stop carrying its signal, the carriage of which WDIV had not consented to. fm)

Mike Cherry, Box 631, Ganges BC VOS-1E0 (604) 537-5201

PDT

#### Equipment:

Kenwood RZ-1 receiver, channel 6 crystal trap. Hitachi 5" black & white monitor, Sony Beta Hi-Fi MTS VCR. Antennas: VHF - Lindsay CC-30 22 element log-periodic with Dalco EID-3SV 28 dB mast-mount preamplifier @ 38 feet with "ARM-strong" rotor. UHF - Radio Shack 4 bay with 15-1108 adjustable mast-mount preamplifier @ 57 feet asl/agl.

		1990					1	Es		\$KPRY			1170	9	Es	2001	KMTV	(C) 210	E 1440
28	tr	0247	KREM		WA	315			2026	KDUH			1095			2032	KIMT	3 I	4 1520
		0252	KXLY		WA	315			2029	KTVS			1165			2100	KSWK	3 K	3 1365
30	Es	1832	KLNE			1325			2044	KEYT			1010			2104	KOB	4 N	4 1290
		1900	\$KMTV			1440			2059	KLNE	3	NE	1325			2136	unid	3z Spa	anish
		1933	KNOP	2	NE	1240			2116	\$KTVS	3	CO	1165					a	t 120°
		1937	f/out	MUI	F: 1	73MHz			2138	KTVX	4	UT	805			2158	KUSD	2 SI	1350
									2200	KTIV	4	IA	1390			2207	f/out	MUF:	72MHz
Ju	ly '	1990							2202	KLBY	4	KS	1290	10	tr	0638	Yakim	a U's	225
1	Es	2033	\$KWGN	2	CO	1110			2208	\$KIMT	3	IA	1520		Es	2100	KTVS	3 C	0 1165
		2034	KCNC	4	CO	1110			2218	KTVK	3	AZ	1230			2130	unid	ch 3 (	ese
		2050	KSNW	3	KS	1515			2220	KFOR	4	OK	1615			2159	\$KOTA	3 S	0 1030
		2057	KCWC	4	WY	845			2230	KRNV	4	NV	670			2200	KNOP	2 N	E 1240
		2059	<b>KJRHt</b>	2	OK				2246	f/out	MUE		108+	11	Es	1900	KTVK	2 A	Z 1230
		2100	KSWK	3	KS	1365	- 1	tr	1956	OR 24,	24	1 5/	free	12	Es	1726	\$KVBC	3 N	V 995
		2113	\$KMOV	4	MO	1800			2005	KMTR	16	OR	330			1900	KOTA	3 S	0 1030
		2159	KLBY	4	KS	1290	1	B Es	1859	KTWO	2	WY	940			1916	KCRA	3 C	A 740
2	Es	0942	KSWK	3	KS	1365			1900	\$KPRY	4	SD	1170	15	Es	2014	KDUH	4 N	E 1095
5	Es	1740	KENW	3	NM	1480				KDLO	3	SD	1260			2026	KTVS	3 C	0 1165
		1743	\$KVBC	3	NV	995			1912	KTVS	3	CO	1165			2029	\$KTWO	2 W	Y 940
		1746	KRON	4	CA	770			1920	KWGN	2	CO	1110			2139	\$KEYT	3 C	A 1010
		1800	KTVQ	2	MT	750			1938	KIDK	3	ID	650	17	Es	1816	\$KMTV	3 N	E 1440
			KCWC	4	WY	845			2000	KUSD	2	SD	1350			1913	KSNBt	4 N	E
		1803	\$KNBC	4	CA	1055			2001	KSWK	3	KS	1365				\$KCNC		0 1110
		1814	WDAF	4	MO	1590			2052	KKTO			1260			1936			0 1110
		1816	KMTV	3	NE	1440			2100	<b>\$KTVK</b>			1230		tr	1946	OR 24		s/free
		1854	KTWO	2	WY	940			2136	KNAZ			1145			1958		3 C	
		1900	KTVQ	2	MT	750			2138	f/out						2120		27 W	
			\$KREG	3	CO	1040	- 3	tr	0727	KAYU		WA	315		-	2148		22 0	
		1915		4	KS	1290			0730	KXLY		WA	315						Z-22 )
		1926	KEYT			1010			0733	KREM		WA	315	18	tr	0714		2 0	
			\$KCRA		CA				0736	KLEW		ID	355	10			-0815 T		
		2000	KSNW			1515		Es	1946	KLNE			1325					akima	
			\$KSNC			1435		_	2000	KTVS			1165	20	Ec	2114	KTVS		0 1165

CDT

22 Es 1829 KTVS 3 CO 1165 22 tr 2146 KCKA 15 WA 165 Mike Cherry (continued) 1834 KLBY 4 KS 1290 (Snow free) KNAZ 2 AZ 1145 Es 2200 1900 KVBC 3 NV 995 22 Es 1814 KVOA 4 AZ 1325 \$KTVK 3 AZ 1230 1958 KSWK 3 KS 1365 1827 KTVK 3 AZ 1230

CORRECTION: On reviewing videotape - May 28th E skip 1200 and 1230 PDT - calls are XHPN 3 CU, not XEPN as reported in July 1990. Sorry.

E skip has mostly been spotty and very sporadic - usually only one, maybe two stations in at a time and usually for about 15-30 minute durations. Some loggings this report were openings of two minutes duration or less! The Dalco EID-3SV preamplifier was sent to me as a prize by Doug Allen in Colorado who intended it for FM use. Same problem as with Realistic 15-1108 - on FM there is too much intermed, imaging, etc. I decided to try it as a comparison to the Lindsay VX-25 preamplifier and like the Dalco unit better when both have been used on the VHF-TV array. The EID-3SV has an extra three dB of gain and has no gain adjustment - a feature I don't use or need anyway. I'll box up the VX-25 as a spare, if needed. Hope everyone has taken a shot for some meteor scatter with the Delta-Aquarids (late July) and Perseids (August). Good luck with the ID's!

The above E skip loggings don't include numerous unids except for the two with some clues as to origin. Some relogs not noted. As I'm well into my 2nd season of TV E skip, I'm getting to know my "regulars" (read: pests) KTVS-3 CO, KSWK-3 KS, KLBY-4 KS, KMTV-3 NE, KTVK-3 AZ, and KVBC-3 NV have been in almost daily! Very little tropo, but with the hot weather there has been a fair amount of local enhancement (up to 200 milerange) on all bands recently. No meteor scatter or F2 noted. 73's, Mike

Doug Allen, P.O. Box 5646, Woodland Park CO 80866 (W2CRS)

MDT

DX from my gift shop in Divide, four miles west of my home in Woodland Park at 9100 feet.

#### Equipment:

1981 13" black and white Magnavox, Antennacraft CS-1000 30 element yagi at 20 feet with rotor.

Jun	e 1	990					22	Es	1232	WSB	2	GA	1200	6	Es	1200	KREM	2	WA	855
	Es	1806	WCMH	4	ОН	1170			1235	WAVE	3	KY	1035				KLEW		ID	795
	tr	1100	KSWK		KS	230			1303	WDIQ	2	AL	1165				(State	#2	28)	
	Es	1400	CFRN			1066			1305	WRBL	3	GA	1225			1357	CKND2	2		816
11	Es	1400		ch 3	PE	S			1700	KATC	3	LA	950			1400	CBWFT1			
		1430	unid														KBMEt	3	ND	
		1.400	unid				Ju	ly '	1990										nne	
14	tr	0930	KSWK		KS	230	1		1730	KGFE	2	ND	720			1430	KBME	3	ND	565
16.00	Es	1329	WSIL		IL	880				(State	#:	27)		7	Es	1307	KTAL	6	TX	745
	1.0	1346	WMAR		MD	1515			1740	CBWFTt	3	MB				1359	WTTV	4	IN	1010
		100	(Doub		qor	-	3	Es	1330	WRCB	3	TN	1115			1533	WAVE	3	KY	1035
			100	stat		\$ 26)	4	Es	1100	WCIA	3	IL	885	11	Es	1047	WDTN	2		1110
		1400	WDTN		OH	1110			1159	KGAN	2	IA	725			1100	WTWO	2	IN	945
		1510	WTWO		IN	945			1500	CFAC	2	AL	945			1217	WTVF	5	TN	1015
		1515	WAVE		KY	1035	5	Es	1100	WBRZ	2	LA	990			1252	WKRN	2	TN	1015
		1526	MMLW		MI	1040			1300	KEYT	3	CA	880			1334	WSIL	3	IL	880
16	tr	1000	KBSL	10		190				KNBCt	4	CA				1400	KTVI	2		790
1.9		1000	KTVS	3		155	6	Es	1030	KEYT	3	CA	880	12	Es	1151	WBRZ	2	LA	990
			KSWK	3		230			1037	KSBY	6	CA	895			1200	KATC	3	LA	950
		1030	KSTF	10		220			1100	KOMO	4	WA	1050	13	tr	1040	KSTF	10	NE	220
18	Es		XEFB	2		961			1130	KATU	2	OR	1005			1100	KGWN	5	WY	145
,0		1511	WBRZ		LA	990			1131	CFAC	2	AL	945							

All of the above DX was from my store in Divide, Colorado, about three miles west of my house. Although at 9100 feet elevation, it is 100 feet higher than my home QTH; it is situated in a depression with the horizon only a few hundred feet to the north, Pikes Peak ten miles south southeast, and Rampart Range five to ten miles to the east. It is a better location for E skip, a worse one for tropo than my home QTH on the top of a hill. It undoubtedly is a better tropo DX location for west and south, but I have yet to get any tropo from those directions.

After the late May - early June E skip which I mostly missed, E skip has been poor to fair, not one of the better years.

I plan to have my UHF DX'ing setup up and running by the end of August.

Doug Smith, 3105 Oakridge Avenue, Madison, WI 53704-5848

Western TV-DX

Equipment: Sears tabletop color stereo set, big (model unknown) Winegard VHF only, and Radio Shack "panel" UHF, antennas up about 25 feet.

July 1990					4	tr	2003	KSTP	5	MN	221	4	tr	0740	WHMB	40	IN	269
3 tr 0600	WIIB	63 1	IN	299				WKBT	8	WI	114				W68BR	68	IL	60
	WHMB	40 1	IN	269				WHLA	31	(MN)	107			(Rock	ford	1	VCF	2-38)
1900	KTVOt	3 1	MO		6	Es	1014	WESH	2	FL	1041				WXIN	59	IN	268
	( See	Note	e #	1)			2021	WMAR	2	MD	687				WEEK	25	IL	170
	WTJR	16 ]	IL	228			2027	WUND	2	NC	826				WTTK	29	IN	225
	WICS	20 1	IL	219			2100	WBRZ	2	LA	864				WCLJ	42	IN	299
	WRSP	55	IL	217	7	tr	0740	WYIN	56	IN	136				W36A0	36	IL	80
	WAND	17	IL	211				W62	62	??				(Pala	tine			(NLV
	WYIN	56 1	IN	134				( See	No	te #	3)	8	Es	1355	WPBT	2	FL	1291
	WCIA	3 1	IL	204				WICD	15	IL	219				WESH	2	FL	1041
	( See	Note	# s	2)				( See	No	te #	4)				WUFT	5	FL	971
4 tr 2003	WHWC	28 V	NI	174				W33AR	33	IL	60			1900	WPBT	2	FL	1291
	WEAU	13 1	WI	126			(Rock	ford		WCIU	J-26)							

Distances on LPTV's are approximate.

Note # 1 - Tentative. Severe CCI to WISC-3 while Quad Cities and Quincy stations were in with excellent signals.

Note # 2 - I knew I'd eventually log a DX station on channel 3 (WISC-3 is ten miles away and line of sight..) but never thought I'd do it on tropo before I'd do it on E skip! News with CBS national stuff and ad for apartment complex with area code 217 slipped in while WISC-3 was in black.

Note # 3 - TBN, relaying WWTO-35 off air. (They aired a WWTO ID at 0800). Suspect

Rockford, but could be elsewhere.

Note # 4 - Local WMTV-15 off air until at least 0930 with transmitter problems.

(I presume your logging of WWTO on channel 62 is W62BU, Rockford. fm)

Ed Frye, 22618 Cardiff Drive, Santa Clarita CA 91350-3017

PDT

Equipment: See August 1990 Western TV-DX

		1990	
8	Es	1045	cci - channel 2 northeast
10	Es	2300	cci - channel 2 northeast-east; weather hot and humid
15	Es	2345	
		2355	unid channel 2 east; "Siskel & Ebert" under KCBS
16	Es	0000	
		0010	unid channel 2 east; audio in/out over KCBS
		0015	unid channel 2 east; extremely heavy CCI and pulsating of pictures; audio overtakes KCBS program
		0020	opening and cci completely fade out
		0900	cci - channel 2 northeast returns! Hot/humid conditions continue
		0930	KLEW-3 (810 miles)
			cci - channel 2; heavy "venetian blinds"; MUF briefly to channel 4
		0940	KOAB-3; lasts until 1010
		0945	cci - channel 2; nearly overtaken again!
		1015	unid channel 3 east; "Golden Girls"
		1030	opening rapidly fades; weather conditions cool down
19	Es	1900	cci - channels 2 and 4 northeast-east
		1915	unid channel 3 east; ABC; central time zone; "Young Riders" cci - channel 4 east; heavy
		1920	unid channel 2 northeast; CBS (under local KCBS)
		2000	4개의 성기가 20 기업의 사실에서는 지난 1일 자기의 회사는 기업에서 중에 가장 사용하다면 하는 것이 없었다. 이 이 아이에서 이 그리고 아이에서 이 그리고 있다면 하는데
		2015	문화인당(TELEPONE) 전경 10 20 20 10 10 20 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20

July 90 in normally dry southern California was earmarked by two tropical storms/hurricanes off the Baja peninsula that sent uncommon amounts of humidity inland. This, in conjunction with the high temperatures that prevail at this time of year, promoted some peculiar low-band skip. In fact, I cannot recall having witnessed such strong cochannel interference on channel 2 before. Noteworthy were the morning hours of July Ed Frye (continued)

16th when a very bold "venetian blind" pattern, accompanied by an intense pulsating picture, dominated channel 2 and overtook local KCBS. Yet, despite all this activity on the screen, only two regional relogs emerged through this short but vivid opening -- KOAB-3, Bend OR and KLEW-3, Lewiston ID.

John Ebeling, 6843 County Road 47, Alborn MN 55702

CDT

DX from cabin at Alborn (Prosit), Minnesota

Equipment: See July 1990 Western TV-DX

Since May (the hot month!), E skip seems to have declined somewhat. I spent a few days in northwest Ontario this past week, but found no E skip on the FM band while up there. (Dryden, Atlkokan and Sioux Narrows regions).

Jur	ne i	1990		13 Es 1018	KKTO 2 NM 1054	4 Es 1200 unid ch 2 XEW
2	Es	0930	KPRC 2 TX 1213	1100	KACV 2 TX 935	1400 KREM 2 WA 1152
		1000	WFMY 2 NC 1011		KAMR 4 TX 937	6 Es 2200 KBCI 2 ID 1156
		1030	WRAL 5 NC 1066	1300	KMID 2 TX 1149	8 Es 2200 WCBD 2 SC 1184
			unid 2, 4 French	14 Es 0115	CKSA 2 SK 884	2230 WSB 2 GA 1010
			CFRS-4? Super 4,	0930	KPRC 2 TX 1213	2300 WPBT 2 FL 1602
			Cable 7	1500	unid ch 4 Texas	WDIQ 2 AL 1116
		1843	WCBD 2 SC 1184		unid ch 2 Texas	2318 WMAB 2 MS 960
		1900	WYFF 4 SC 971		unids chs 2-5	15 Es 2355 KNAZ 2 AZ 1282
3	Es	1800	WCBD 2 SC 1184	25 Es 1730	KNAZ 2 AZ 1282	16 Es 0005 KMID 2 TX 1149
8	Es	1700	WUND 2 NC 1134			20 Es 2032 KOMO 4 WA 1384
			(Only one in)	July 1990		23 - 26 In Canada on trip
10	Es	1030	unid NBC-2 CBS-2	1 Es 1812	KUTV 2 UT 1065	27 Es 2137 KREM 2 WA 1152
		1100	WGRZ 2 NY 748	3 Es 1630	KDTN 2 TX 1021	2340 unid channel 2
		1255	KKTO 2 NM 1054		( Like a local )	(Very good pic )
11	Es	1000	KMID 2 TX 1149	4 Es 0930	KREM 2 WA 1152	

Jeff Kadet, Box 20, Macomb IL 61455

CDT

Equipment:

Zenith 9" black & white, Zenith 12" black & white, Zenith N1310, Zenith Y1310 (all circa 1979-1982). Winegard CS-2073 10 element ch 7-13 log periodic with CP 3800 preamp, RG-11 foam up 80'; Channel Master 7' dish with PA 4975 preamp, 500 aluminum hardline, up 75'; Stereo Probe 9 with RG-11 foam up 43'; Finco 5 element 50-54 MHz yagi with Belden 9913 up 37'

May 1990	170000000000	17867																
28 Es 0354	KREM	2	WA	1403	77.7		1159	KSWK	3	KS		27	ES	1100	KLBY	4	KS	572
	KHQ	6	WA.	1403	31	Es	PM	KTAL	6	LA	580							
0359	<b>e</b> KZZC	4	UT									Au	gust	1990	)			
	KVBC	3	NV	1351	Ju	ne	1990					1		New o	dish in	sta	11e	d
0521	CFQC1	3	SK	1149	9	tr	at Fr	ank Me	rri	11':	S		tr	PM	K58DH	58	MO	125
	eKTVX	4	UT	1127			0500	CHCH	11	ON	593		(\$1	Lou	ıis			VJN)
	KUTV	2	UT	1127				WJBK	2	MI	411				WPBY	33	WV	472
	KGWN	5	WY	750				WJJA	49	WI	-			2017	W62BU	62	IL	150
0538	<b>e</b> CHAT	6	AB	1186				(Home	sh	opp.	ing )			(Rock	ford			TBN)
	eKIDK	3	ID	1145				W34AY	34	IL	148				WPGH	53	PA	561
0654	eKTVQ	2	MT	966		(C	hampa	ing			TBN)				WPCB	40	PA	573
0714	CFQC2	6	SK		20	Es	0930	CBKT1	4	SK	1006	2	tr	0006	W47AZ	47	IN	240
0727	CBKFT2		3 SI	K1133				Cuba	ch	5 -	TP			(Ind	anapol	is		VJN)
1400	CKRD	6	AB	1358	26	Es	1435	XERP(	T?)	2 '	??			0315	W19BA	19	MI	308
	CITL	4	AB					(ID w/	XER	PS(1	rs?))			(Gran	nd Rapi	ds		TBN)
	CKBI	5	AB					(New	st	atio	on?)				WDCA	20	DC	728
	CBXT		AB	1410			1830	WDIQ		AL	660			0900	WDSI	61	TN	467
1723	XHBQ	200	ZA	1370	27	Es	0.000000	WMAB	120	MS	498				WTCI	45		467

There occurred a minor mishap here in March. Mainly, my seventy foot tower fell during a severe windstorm. At least it fell on my house and not a neighbors'. My ham antenna and the channel 7-13 log periodic were demolished, but the seven foot dish survived somewhat intact, with no harm to the bowties or screen. A few reflectors were slightly bent and a few others broke, but they were repairable. The dish was stacked between the ham and the log periodic so it was "cushloned" in the fall.

Jeff Kadet (continued)
Anyway, I decided to put up a new tower, but this time it was done in such a way that I'll never have to worry about it falling again. Better quality tower, guys, anchors, mast, plus guy wire redundancy in case any should somehow break. A new dish was ordered, but the order got messed up. So instead of waiting for most of August for a new one to come, I decided to repair the one that fell and screen it. Screening was done per the Nate Ely method of using strips of 1/2" hardware cloth between the reflectors in front and fastening them with cable ties. I used about 150 ties, so the parabolic shape was kept well intact.

I also decided to put the tower up another ten feet to eighty feet. This extra ten feet makes a big difference as the antennas are now above all of the trees in town. Also purchased a Winegard PA-1375, their low noise VHF equivalent to the PA-4975, and am using my old CM 1110 under the dish. The combination of screening and extra height makes a very significant difference. The screening makes the front to back on the dish awesome, plus it does increase the gain somewhat. Needless to say, this new antenna system is a keeper. I never want to even think of TV antennas again!

Lots of E skip seen, but I didn't bother logging any unless it was unusual. The May 28/29 E skip was the most intense ever noted. There was E skip on channel 6 for twenty seven consecutive hours. E skip station total now at 230.

Congratulations to Roy Barstow on his terrific tropo catches while using only a modest system. 73.

Randy Miltier, 1068 Fairview Avenue, San Jose CA 95125 (KK6BO)

PDT

Equipment:

Western TV-DX

1989 Zenith 27", Zenith VCR, Channel Master Quantum 1160A VHF/UHF antenna @ 50 ft. Alliance rotor.

Well, 1990 should go down as one of the worst years for sporadic E on the west coast. Conditions have really been lacking here for any good openings. July 1st was the best day I observed here and it really wasn't anything to write about. However, there was one bright spot and that was today, August 3rd, when CFQC on channel 3 was seen. This really caught me by surprise as the antenna was pointed EAST with what looked to be the old reliable KENW-3 and KACV-2. When the ID came up it was CFQC (new here) and the camera was in the car! I did finally manage a photo of the ID but nothing like what I saw when it first appeared....just goes to show you, ya never know!!

Al Tobia and myself went to Ashland, Oregon for a big DX'pedition. The only DX we snagged was KNOP-2 in Nebraska and we barely got it. DX conditions just weren't there for us. Oh well, we had fun anyway, next time I think we'll go in July. (Lenny Goldberg, call me at 408-264-5870 or drop a line).

I hope sporadic E was happening somewhere else in the country cause it wasn't happening here. Until next time, 73...

940 960 anish anish 1 BC 1 4 19	7 Es	1901 1833 1834	(ID'd )	hannel 3 W/NBC,CBS, - KTVS? ) 3 NM 1060 2 TX 1125 2 MT 940
940 960 anish anish 1 BC 1 4 19	7 Es	1900 1901 1833 1834	(ID'd ) & LBS KENW KACV KTVQ	/NBC,CBS, - KTVS? ) 3 NM 1060 2 TX 1125
anish anish 1 BC 1 4 19 620	7 Es	1901 1833 1834	& LBS KENW KACV KTVQ	- KTVS? ) 3 NM 1060 2 TX 1125
anish anish 1 BC 1 4 19 620	7 Es	1901 1833 1834	KENW KACV KTVQ	3 NM 1060 2 TX 1125
anish anish 1 BC 1 4 19 620	7 Es	1901 1833 1834	KACV KTVQ	2 TX 1125
anish 1 BC 1 4 19 620	7 Es	1833 1834	KTVQ	
BC 1 4 19 620		1834		
1 4 19 620				
620			KACV	2 TX 1125
		1338		hannel 3
1082		1525	KMID	2 TX 1170
905		1633	KENWt	3 NM
1169				2 TX 1125
	2 Fs			2 TX 1125
1367				3 NM 1060
	6 Es			2 TX 1125
				3 TX 1331
				3 NM 1060
1182			33357333	0 101 1000
BS A	ugust	1990		
				n2 Spanish
				h3 Spanish
1125	2 Fe	0000		3 SK 1190
1060		0924		
		0947		3 PBS
1 2		1028		3 CO 1039
-			unid ch	
	1082 2 1367 1039 2 1225 1182 38 A 1039	1082 22 Es 1367 1039 26 Es 1225 1182 3S August 1039 2 Es 13	1082 22 Es 1000 1367 1001 1039 26 Es 0929 0930 1225 1059 1182 3S August 1990	1082 22 ES 1000 KACV 1367 1001 KENW 1039 26 ES 0929 KACV 0930 KFDX 1225 1059 KENW 1182 38 August 1990 1039 2 ES 1935 unid ch unid ch unid ch unid ch unid ch unid ch unid ch unid ch unid ch

CST

#### Equipment:

1980 model 9" J.C. Penney b&w with Archer V-100 and 8-bay bow-tie UHF array at 20 feet with rotor.

		1701	WJMN	3	MI	1310	11	Es	2059	CKND2	2	MB.	1440	19	Es	1531	WRCB	3	TN	865
•	LJ	1729	KGAN		IA	960			0945	Cuba		ch 2		1.00		1534	WTWO	2	IN	925
		1858	KTCA			1115			1130	KWGN			805			1859	KGAN	2	IA	960
5	Ec	1759	WSJK	100		1005	1.5	LS	1201	KUTV			1085			1903	WCIA	3	IL	930
6	LS	1859	WKRN		TN	815			1326	KTVQ			1245	20	EW.	1957	KEYT	3	-	1300
			KVBC			1055			1559	KCBS			1190			1359	WPBT			1145
		2059												21	ES	1429	WEDU		FL	990
	_		KNAZ		AZ	845			1712	WKRN	2	TN	815				WDIQ		AL	735
3	ES	0314	KTVI		MO	780	1100		1803	YSR		ES				1528		3		1235
		2102	KOTA		SD	1040	14	ES	0859	KOTA		SD	1040			1549	WWAY			
		2117	WDTN		OH	1075			0.022	KGAN		IA	960			1609	WBTV		NC	1085
4	Es	1033	KTVK		AZ	840			1435	WJBK			1235	22	ES	1128	WJBK		MI	123
		1059	KVBC			1055			1529	KXMA			1215			1257	WTWO	2	IN	925
			KNAZ		AZ	845			1532	WBBM			1050			1300	WDTN	2	OH	1075
		1159	KUTV			1085			1534	WWMT			1160	23	tr	0039	KBMT		TX	280
		1214	KCBS		CA	1190			1547	WTWO	2	IN	925			0045	KFDM		TX	275
		1245	KWGN		CO	805			1558	NMLW			1310			0247	KLFY		LA	370
		1258	KREG		CO	850			1600	WBAY		WI	1180			0439	KATC	3	LA	370
		1259	KTVQ	2		1245	15	Es	1324	KCBS	2		1190			0444	WAFB	9	LA	44
5	Es	1129	KIDK	3	ID	1240			1359	KNAZ		AZ	845	25	Es	1659	WCIA	1.53	IL	93
		1659	KBME	3	ND	1190			1459	KREG	3	CO	850			1829	WRTV	6	IN	100
			KDKA	2	PA	1290			1530	KWGN	2	CO	805			1946	WITI			1111
		1700	CKND2	2	MB	1440			1617	KTWO	2	IN	1015			2117	WAVE	3	IN:	950
	tr	2128	WVLA	33	LA	435			2100	WBAY	2	WI	1180			2128	WSJK	2	TN	100
		2129	KADN	15	LA	380			2119	KDLO	3	SD	1070			2143	WCBD	2	SC	113
		2139	KPLC	7	LA	335	16	Es	1059	KGFE	2	ND	1290	26	Es	1256	WDTN	2	OH	107
6	tr	0350	KTRE	9	TX	260				KGAN	2	IA	960			2115	KDLO	3	SD	107
Ī		0403	WAFB		LA	440			1100	KDLO			1070	28	tr	0337	KTRE	9	TX	26
		0409	KNOE		LA	425			1229	KUSD	2		940			1458	WBAY	2	WI	118
		0414	KLFY		LA	370			2119	KDLH		MN	1245			1506	WKYC			125
		0417	VTLW		MS	515			2237	KTWO		WY	1015			1517	WAVE			951
		0420	KETG		AR	440	17	tr	0006	KLFY		LA	370			1528	KIMT			101
		0420	KTAL		(LA		100		0416	KLTV		TX	290			1532	KGAN		IA	96
			WLBT		MS	520		Fe	1210	KUTV		UT	1085			1541	KAAL	6	MN	
		0442	KTBS	- 5	LA	350		LS	1857	KGFE		ND	1290			1558	WITI	6	WI	111
	To.	0744	WKRN		TN	815			1859	KMTV		NE	830			2229	WSAZ	3	WV	112
	ES				WV	1120			2114	KDLO		SD	1070	20	E-	2034	KQTV	2	MO	74
		0753	WSAZ				40					IA	960	29	ES	2059	KUSD	2		94
	-		WSAZ		WV	500000000000000000000000000000000000000	18	ES	1059	KGAN				20						
1	Ł.S	0917	WCBD		SC				1359	KXMA		ND		30	ES	1822	WWMT	3	MI	
		0930	WDTN	2	200	1075			1736	WFMY		NC				1832	WCIA	3	IL	930
	160	0958	WESH	2					1758	WFMY		NC	1170			2100	WBTV	3	NC	108
		0959	WSIL	3		790	19		0323	KLFY		LA	370			2115	WTWO	2	IN	92
8	Es	1024	XHBC	100	BN			Es	0859	WFMY		NC				2121	WDTN	2	OH	0.055541
		1057	WFMY	2	100				0958	WCBD		SC				2157	KMTV	3	NE	330
9	Es	1158	WTWO	2	IN	925			1239	WSAV	3	GA	1035			2247	KXMA	2	ND	1215

E skip MUF reached 144 MHz on June 1st (Michigan, Wisconsin, and Illinois), June 3rd (W4, W8, W9, and Maryland) and June 28th (Illinois).

The dreaded KO2MX LPTV raised its ugly form again on June 19th. I'm in the process of trying to determine the licensing requirements, etc. from the FCC Broadcast Bureau in DC with regard to programming, renewal of permit, etc. If that doesn't work, I may get with some of the members on the House Subcommittee on Telecommunications.

Almost three years of nothing but color bars with tone has been a complete travesty of the Intent of the LPTV service. 73, Pat, WA5IYX

William Eckberg, 1032 Sterling Road, Dixon IL 61021

CDT

Equipment: See July 1990 Western TV-DX

June 1990					1	Es	1300	KMID	2	TX	967	3	Es	2103	KATC	3	LA	809
1 Es 0730	WPBT	2	FL	1229				KACV	2	TX	803			2130	KPRC	2	TX	893
	WEDU	3	FL	1031			2100	WPTV	5	FL	1168			2200	KDTN	2	TX	719
1300	KENW	3	NM	912			2357	KTTT	3	TX	1072			2210	KMTD	2	TX	967

118	am Eck	berg (	cont	tin	ued)	27	Es	1200	WTVY	4		758	8	Es	1548	WPTV			1168
								1300	WTVJ	4	FL	1229			1553	WCIX	6	FL	1229
Es	2230	XEPM	2	CH	1162	28	Es	1430	KWGN	2	CO	811			1555	WPBT	2	FL	1229
tr	0355	KSAX	42	MN	404			1700	KACB	3	TX	933			1600	WEDU	3	FL	1031
Es	1823	KKTO	2	NM	972			1715	KENS	5	TX	992			1615	XEPM	2	CH	1162
tr	0550	WOIO	19	OH	401			1900	KENW	3	NM	912			1700	WUFT	5	FL	923
	0650	CBLN3	64	ON	368			2105	KNAZ	2	AZ	1258	9	tr	0530	KSAX	42	MN	404
	0655	CBLN	40	ON	419								12	Es	1100	WBRZ	2	LA	784
Es	2200	KKTO	2	NM	972	Ju	ly	1990							1635	KKTO	2	NM	972
tr	0415	WLOS	13	NC	558				KTAJ	16	MO	311				KTWO	2	WY	849
	0420	WBIR	10	TN	489			2225	WKSO	29	KY	405	13	Es	1300	KMID	2	TX	967
	0455	WKCH	43	TN	489	4	tr	0420	KSNF	16	MO	413			1400	KENW	3	NM	912
	0515	WEMT			518			0455	CFPL	10	ON	419	18	Es	1800	WPBT	2	FL	1229
						7	Es			3		856				WESH	2	FL	983
	0533	WUNF	33	NC	558					3	TX	1072				WEDU	3	FL	1031
	0545	WMSY						1135		4	TX	1183	19	Es	0415	CKCK	2	SK	918
Es	2100	KNME								2	FL	1229			1000	WPBT	2	FL	1229
Es	1830														1055	WTVJ	4	FL	1229
																WPTV	5	FL	1168
								1330			100000						5		1189
			2														3	FL	792
	0830		3														6		
			4														6		
										10.00			21	tr					132
	0930												7						TBN)
						8	FS												
EtEt	s r s r	s 2230 r 0355 s 1823 r 0550 0650 0655 s 2200 r 0415 0420 0455 0515 0530 0533 0545 s 2100 s 1830	2230 XEPM 1 0355 KSAX 2 1823 KKTO 1 0550 W0IO 0 650 CBLN3 0655 CBLN3 0655 CBLN3 0655 WKTO 0 0420 WBTR 0 0456 WKCH 0 0515 WENT 0 0545 WKSN 0 0533 WUNF 0 0545 WMSY 0 0545 WPBT 0 730 KXAS 0 0830 WLBT 0 900 WWL 0 WBRZ 0 930 KBTX	\$ 2230 XEPM 2 \$ 10 355 KSAX 42 \$ 1823 KKTO 2 \$ 10 550 WOTO 19 \$ 0650 CBLN3 64 \$ 0655 CBLN 40 \$ 0655 CBLN 40 \$ 0655 WKTO 2 \$ 2200 KKTO 2 \$ 10 0455 WKCH 43 \$ 0515 WKCH 43 \$ 0515 WKCH 43 \$ 0515 WKCH 33 \$ 0545 WKSN 47 \$ 0533 WUNF 33 \$ 0545 WKSN 52 \$ 2000 KSN 47 \$ 0533 WUNF 33 \$ 0545 WKSN 52 \$ 2000 KSN 47 \$ 0533 WUNF 33 \$ 0545 WKSN 52 \$ 2000 KSN 47 \$ 0533 WHST 2 \$ 0730 KXAS 5 \$ 0515 WPBT 2 \$ 0730 KXAS 5 \$ 0730	\$ 2230	S   2230   XEPM   2   CH   1162	28 2230 XEPM 2 CH 1162 28 28 27 0355 KSAX 42 MN 404 45 1823 KKTO 2 NM 972 27 0550 W0TO 19 OH 401 0650 CBLN3 64 ON 368 0655 CBLN 40 ON 419 28 2200 KKTO 2 NM 972 27 0415 WLOS 13 NC 558 0420 WBTR 10 TN 489 0455 WKCH 43 TN 489 4 0515 WEMT 39 TN 518 0530 WSBN 47 VA 483 7 0533 WUNF 33 NC 558 0545 WMSY 52 VA 533 55 200 KMME 5 NM 1026 55 1830 WPBT 2 FL 1229 0730 KXAS 5 TX 757 KXAS 5 TX 757 KXT 719 0830 WLBT 3 MS 651 0900 WWL 4 LA 813 WBRZ 2 LA 784 0930 KBTX 3 TX 856	S 2230 XEPM 2 CH 1162 28 ES 1823 KKTO 2 NM 972 17 0550 W010 19 OH 401 0650 CBLN3 64 ON 368 0655 CBLN 40 ON 419 05 12 TO 1550 W010 19 OH 401 0650 CBLN3 64 ON 368 0655 CBLN 10 TN 489 0455 WKCH 43 TN 489 0455 WKCH 43 TN 489 0455 WKCH 43 TN 489 0515 WBMT 10 TN 489 0515 WBMT 39 TN 518 0530 WSBN 47 VA 483 7 ES 0533 WUNF 33 NC 558 0533 WUNF 35 NM 1026 15 1830 WPBT 2 FL 1229 0730 KXAS 5 TX 757 KDTN 2 TX 719 0830 WLBT 3 MS 651 0900 WWL 4 LA 813 WBRZ 2 LA 784 0930 KBTX 3 TX 856	1300   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500   1500	S	1300   WTVJ   4	1300   WTVJ   4 FL	1300   MTVJ   4 FL   1229   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   1228   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1229   1553   WCIX   6   FL   FL   1035   FL   1035

Is WEMT a new call for WETO in Greeneville, Tennessee? (Yes. fm). Asheville 33 shows a slide before sign on with the letters NCPT, nothing else. It took a couple minutes to decide who I had - North Carolina Public Television.

Michael Parks, Route 1, Box 103, Amery WI 54001

CDT

#### Equipment:

Western TV-DX

Channel Master 1110 Quantum with Channel Master 0064C preamplifier and RG-11U at 28°, Antennacraft P-7 with Winegard PA-4975 preamplifier and RG-11U at 33°, Alliance HD-73 rotor, Winegard DA-8150 post-amplifier, Channel Master 7206 Hi "Q" trap, and Zenith Z1920W 19" color TV.

May 1990	29 tr 0110 K45AR 45 MN 144	4 tr 2308 KDEB 27 MO 568
	(Eagle Bend C-Span)	KSPR 33 MO 567
27 Es 2228 KPRCt 2 TX	0144 K28DF 28 MN 111	2309 KDNL 30 MO 482
28 Es 0041 KBTX 3 TX 1047	(Brainerd KMSP- 9)	2310 KHSL 46(MO) 493
(AN wx radar w/	0211 KFME 13 ND 260	5 tr 0110 KOLR 10 MO 567
NOAA NWS audio)	0327 K26CL 26 MN 157	(Under KTTC-10 )
0042 WRBL 3 GA 989	(Alexandria WGN- 9)	0258 KSHB 41 MO 453
0048 =WEAR 3(AL)1052	(Unscrambled)	13 tr 0326 K15CE 15 MN 144
0102 =WLBT 3 MS 918	K26AC 26 MN 191	(Redwood F11s KTMA-23)
0105 = KRMA 6 CO 947	(Bemidji KVRR-15)	
0106 =WDSU 6 LA 1076	( 0 kHz - K26CL)	Plus chs 17, 60,
0120 WWL 4 LA 1078	( See Note # 1 )	%62, 66, 68
0200 KCEN 6 TX 1012	Es 1359 KIDK 3 ID 1012	0329 K30AC 30 MN 188
1345 KTVM 6 MT 972	1459 KLEW 3(WA)1191	
1428 CHAT 6 AB 925	1600 CFRN 3 AB 1086	0349 K45AR 45 MN 144
1446 CKRD 6 AB 1079	1838 WEAR 3(AL)1052	0350 K28DF 28 MN 111
1522 CFQC1 3 SK 858	1843 WDSU 6 LA 1076	0424 KDSD 16 SD 262
1545 unid ch 6 French	1858 WCTV 6(FL)1114	0436 K21AK 21 MN 176
(Es gone by 1610)	1903 WUFT 5 FL 1211	(Morris Starion)
29 tr 0104 KGFEt 2 ND	1930 KIIIt 3 TX	0438 K57BL 57 MN 188
0107 K20AC 20 MN 151	2000 WTVY 4(FL)1062	(Donnelly KTHI-11)
(Wadena KSAX-42)	WWL 4 LA 1078	
K63DX 63 MN 151	2058 KPRC 2 TX 1109	(Donnelly KVRR-15)
(Wadena KMSP- 9)	31 Es 1400 WRBL 3 GA 989	( See Note # 3 )
0109 K63DY 63 MN 110		K59BT 59 MN 188
(Little Falls KMSP- 9)	June 1990	(Donnelly KMSP- 9)
K69DA 69 MN 110	1 Es 0104 WRBL 3 GA 989	K63BW 63 MN 188
(Little Falls KSAX-42)	0155 WSB 2 GA 908	(Donnelly KSAX-42)
K32AE 32 MN 133	1530 WLBT 3 MS 918	14 Es 1402 WLBT 3 MS 918
(Long Prairie KSAX-42)	3 Es 1900 KATC 3 LA 1062	1422 KBTXt 3 TX
*		L.

Mich	nae	1 Par	ks (cor	tir	uec	)	10	tr	0311	W65BT	65	WI	271	20	tr	0012	K62AA bod F11 K66BB bod F11 K68BJ bod F11 K39CHt (Too m K15CE ( See K17BV bod F11	62	MN	144
									(Milw	aukee	V	CIU	-26)			(Redwo	ood FII	SW	CCO	- 4)
14 E	S	1422	KFDX	3	TX	863			0315	W27AU	27	WI	133				K66BB	66	MN	144
		1500	KACB	3	TX	1049			(Wausi	au	W/Y	ISN	-12)			(Redw	ood F11	SK	MSP	- 9)
16 E	S	2146	KIDY	6	TX	1053				(Norma K27CW	al V	IJFW	-12)				K68BJ	68	MN	144
25 E	s	2000	KBTX	3	TX	1047			0414	K27CW	27	MN	93			(Redw	ood F11	sk	ARE	-11)
		2100	WLBT	3	MS	918			(Roch	ester	1	NTI	-29)			0015	K39CHt	35	) MN	I
		2130	KFDX	3	TX	863				( See	Not	e #	6)				(Too m	uch	1 W3	9AF
26 F	S	2205	WWAY	3	NC	1078			0432	( See K26CL	26	MN	157			0032	K15CE	15	MN	144
1000		2231	WBTV	3	NC					(Now :	SCF	I dans	ed )				( See	Not	e #	2
27 F		0116	WESH	2	FL	1286			0501	(Now :	15	MN	144				K17BV	17	MN	144
			WSB t	2	GA					( See	Not	e #	2)			(Redw	ood F11	S	(ITN	-29
28 1	S	1823	KIII	3	TX	1261			0513	( See K65BY	65	IA	214							
		1839	KRGV	5	TX	1365			(Wate	r100			TBN)	Au	gust	1990				
			( See			4 4 )	11	Es	1553	KATC	3	LA	1062	2	Es	1956	KIIIt	3	TX	
		1900	KCENt		TX		12	Es	1500	KMID	2	TX	1065				KPRCt	2	TX	
		1902	KIDY			1053				(As p	er	thei	1065 (r CP ( - )			2100	KRIS	6	TX	125
		1002	0.000		0.5.0	(4:55)				off	set	now	1 - )				WDSU	6	LA	107
hirls	v 1	990							1515	KIDK	3	ID	1012			2158	KMID	2	TX	1065
		2200	KDLO	3	SD	260	16	tr		K65BY	65	IA				2230	KPRC	2	TX	1109
		0027	KESD		SD	253				KASAV	12	MN	145	3	tr	2340	K16BQ	16	MN	11
9		0029	VMEC	14	TA	292			(c+	James		KTMA	145 145 1-29) # 7 )			(Brai	nerd	1	KSAX	(-42
		0035	Green	Ra	ve	2 5				K50AB	50	MN	145				K54AT	54	MN	12
		.0030	11 ov	ar	100	ale			(St.	James		KITN	V-29)			(Brai	nerd	1	KVRF	1-15
		0036	Green 11 ov Chica South	an	IHE	¹ e			1001	( See	No	te t	ŧ 7 )			2341	K28DF	28	MN	11
		0030	South	go Bo	nd	16		Fs	0116	KVRC	3	NV	1350			2344	K45AR	45	MN	14
			South	De	2	2, 46	17	tr	2340	K30AC	30	MN	188			2345	K63DY	63	MN	11
		0038	ALLW	40	WI		1.1		2343		16		262				K69DA	69	MN	11
		1358	WTJR		IL	378	10	+-	0004	1.00	17		258			2346	K63DY K69DA K20AC K63DX K32AE K66BI	20	MN	15
7		1757	KIDK	3			10	U	0004	( See			# 8 )			2010	K63DX	63	MN	15
			KOIA		IA				0007	KESD		SD	253			2348	K32AF	32	MN	13
9	tr	0105			IA	200			0010	KOOAD	20	MN	209			2349	KEERT	66	MN	10
			@KJMH		-	322			(Wort	hinata	. ZU	VETI	D- 5)			(Aitk	in		WDTC	0-10
			@KQWC		IA	281	20		0012	VEGAL	11 F	O M	N S)	A	+ =	0029	K17BV K15CE ( See	17	MN	14
202	200	0235			IL	265	20	CI	0012	(Too	m110	b V	EODC)	7	L.	0023	K15CE	15	MN	14
10	tr		K44AE			135				(100	muc	MAI	144				( See	No	to i	# 2
			lmar			c- 2)			(0-1	NOUAL	100	MIN	144				( 366	140		- 2
			( See	No	te	# 5 )			(Ked	1000 F	IS	KOII	P- 5)							

Note # 1 - This station and associated station K18AI, Grand Rapids, both run black screens all night while primary KVRR-15 is off. Don't know what purpose this serves other than to waste electricity. I believe they used to shut down so this must be a fairly new policy.

Note # 2 - I'm not sure what the deal is with this translator. All four times I saw it, it appeared to be rebroadcasting both its primary KTMA-23 and KSTP-5 simultaneously. It's possible there's a new KSTP translator somewhere but several reason lead me to believe otherwise: it always show up when Redwood Falls does and is in the exact same direction, the KTMA and KSTP signals are of equal strength and that ratio remains constant during the simultaneous fade in/fade outs and the 20 kHz beat present on channel 15 is what would be expected to occur were KTMA (+ offset) and KSTP (- offset) to be converted to the same channel. I thought it might be some kind of image or mixing problem in my equipment, but disconnecting the VHF downlead had no effect. Tuning the UHF trap through the band also produced the same result.

Note # 3 - Yet another example of translators not shutting down after the loss of their input signal. Both K57BL and K61BJ were on all night transmitting a screen full of rapidly fluctuating white sparkles, aka snow. I guess this must be so insomniacs will have something to count besides imaginary sheep.

Note # 4 - A new E skip distance record - and on channel 5 at that! I never have understood why KSTP-5 is so impossible to null out compared to KTCA-2 and WCCO-4. There are a couple of directions in which KSTP's audio is sufficiently low to allow fairly strong skip to override it, but the video is a near impossibility. After six years I've managed to get a grand total of one channel 5 DX photo

Note # 5 - With primary KTCA-2 off, K44AE was doing a terrific job at DX'ing WBAY-2 and KGAN-2. It was picking them both up with very little snow. I'm closer to both stations, yet could get neither. Apparently K44AE's greater receiving height was what did the trick. It was frustrating to

Michael Parks (continued)

think of the great DX that was probably flying overhead just out of my antennas' reach.

Note # 6 - Good luck to DX'ers on this one. I find it hard to believe this station has anywhere near the listed 3.29 kW. It was just barely strong enought to discern KITM-29's programming while Rochester's K60DS at 4.5 kW was putting it to shame with a near snow free signal. Even Winona's K38CL at 0.87 kW was vastly superior, falling just a bit short of K60DS.

Note # 7 - Note the new primaries. For no apparent reason, these two translators

have swapped primaries.

Note # 8 - At long last! Barely managed to snap a picture during the minute they remained on after KTCI-17 sign-off. They went off just a few seconds after the shutter clicked. A couple times before I've seen color bars buried in the snow in the direction of Sioux Falls, but never strong enough to even tell if they were ID'ed.

I had an opportunity to compare a Zenith Z1310 to my Z1920 and after comparing the two, I found the Z1920 to be the better of the two. The only places the 1310 showed an advantage over the 1920 was an extra decibel or two of sensitivity above channel 50 and a slight improvement in lower adjacent channel rejection below channel 20. The biggest disappointment was the 1310's poor selectivity on the VHF band. KMSP-9 produced an image on channel 8 that I found impossible to eliminate whereas the 1920 showed hardly a trace; likewise with WCCO-4 on channel 3. Twisting the 1310's tuning knob from one end of the UHF band to the other was also a pain. I much prefer the 1920's random access tuning. Zenith has evidently taken some shortcuts in producing the Z1310 compared to the Z1920.

K58BS, Minneapolis, began using their new facilities (8.5 kW from the IDS Center) on July 2nd, but went back to the old one six days later when the new transmitter caused transmission problems. As of July 19th, they were back on the new transmitter and they are now quite a pest whereas before I could manage to ignore their presence most of the time. Just as pesty W62BD, Minneapolis, has been off the air since approximately June 1st. Presumably K07UI went with them, but unfortunately I expect them to be back. Their planned program supplier, ValueVision International, has taken longer to set up shop than expected but has recently begun buying and lining up other low power stations to carry their sales pitches.

It's been so long since I last saw W16AC, Land O'Lakes, Wisconsin, that I've come to believe they've gone dark. I knew they wouldn't sell many Starion subscriptions with their cheap scrambling system which made it all too easy to watch for free. It didn't touch the audio or sync signals; just inverted the picture. I never did have any luck receiving KTTC-10's La Crosse translator and now it's too late as W83AH has gone dark. KTTC is now seen there on W67CH. The latest word on KXLI-41/KXLT-47 is that they have been sold to KX Acquisition Limited Partnership in New York City pending FCC approval. No indication of what the new owners intend to do with the stations.

That's all for now... Nanajusan (73), Mike (Mike, I would keep an eye on K30AC when you are noting the interference problem with K15CE. I note that K30AC is on the same antenna heading as K15CE, has considerably more power and is not that much more distant. The picture image for channel 30 falls on channel 15. K30AC carries KSTP and just might be the cause of what you are experiencing. However, you should not be hearing KSTP audio. fm)

43		1000					4.4	E-	1931	KREM		2 WA	000	40	F	DAFE	-4007	4 117	1050
		1990					14	ES	7.55	1,000				10	ES			4 UT	
12	Es	1558	KENW	3	NM	985			2000	KING		5 WA	1195			(MUF	90.5	€ 0204-	- NV)
			(MUF	95	.30	1619)			(MUF	99.3	0	2003-	WA)	22	Es	2142	unid	ch 2 Me	xico
13	Es	2126	KBTX	3	TX	1130			(MUF	89.5	0	2104-	WA)			(MUF	93.1	@ 2159-	TX)
		2130	KPRC	2	TX	1195	15	Es	1257	unid	ch	1 2 AE	BC .	23	tr	0852	K28DI	= 28 MN	130
			(MUF	89	. 502	2239)				(Awa)	v 1	500-0	1130)			(Bra	inerd	KMSE	- 9)

Ju	Ту .	1990					Au	gus	t 1990				10 tr	0758	WHLA	31(MN)	125
20	tr	0729	KTIN	21	IA	155	3	tr	2058	KCCO	7 MN	100		0824	WKBT	8 WI	115
		0759	KSMQ	15	MN	90	7	tr	0658	WXOW	19(MN)	125		0859	KTTC	10 MN	105
		0829	KSAX	42	MN	100			0809	WEAU	13 WI	120		1029	KIMT	3 IA	110
		0859	WHWC	28	WI	75	8	tr	0717	KEYC	12 MN	85					
24	tr	0659	W39AF	39	WI	80			0758	WLAX	25(MN)	125	Sharp	19" w	/ bowt	ie & di	pole
		(Gran	tsburg	1	WHWC	-28)	10	tr	0657	WQOW	18 WI						

## **PHOTO**

SEPTEMBER

Mailing Address: PHLIO-NEws 12284 Nice Rd - Akron Ptv 16001-9529 hotas submitted to PHOTO-NEWS become

the property of this column and will not EDITED BY

David J. Nieman

Jeff Kadet - Macomb, Illinois starts this month column with north & south of the US border skip reception seen this spring. Equipment see August 1990 VHF-UHF DIGEST page 54.



CBKFT2-3 Prince Albert, Saskatchewan 1133 mile E-skip seen May 28, 1990 at 0732 CDTime

XHBQ-3 Zacatecas, Zacatecas 1370 mile E-skip seen May 28, 1990 at 1723 CDTime

Good Morning Acadiana Time 5:43:57 Temp 72° 5:25am Morning Reflection 5:3Dam Louisiana Ag. 7-DDam Little Rascals 7-30am Peppermint Place 8:00am Quantum Marketing ப்பிப்பட் பூர் eco ப்பிப்பா ப்பாeth Copeland 1৩:০০ মা বিচাৰিম মার সুমার Lafayette, LA

Next is Mike Hollis - Masy Esther, Florida with more Gulf of Mexico trops.

KATC-3 Lafayette. Louisiana 330 mile tropo seen April 29, 1990 at 0545 CDSTime

## **PHOTO**

SEPTEMBER 1990 page 2

Mike Hollis DX fotos continue....

WMFE-24 Orlando, Florida 350 mile tropo seen April 29, 1990 at 0642 CDSTime



Grequency: 54 60 Mhz STL: WAH 21 2033 5 Mhz Studio Location: 1650 Highland Rd. Transmitter: Plaquemine Pt., LA Programming returnslates AM With World News This Morning.

Baton Rouge Louisiana 270 mile tropo seen April 30, 1990 at 0407 CDSTime

WBRZ-2

Our last reporter is; Ed Frye - Santa Clarita, California. Equip. Winegard CS-4052 ant.; CM 9510 rotor; CM 7477A MATV preamp; CM 7203 sub-band & 7205 mid-band traps; CM 7270 step attenuator; CM 7035 distribution amp. CM 9549 RG6 coax.

KACB-3 (sat. KRBC-9) San Angelo Texas 1090 mile E-skip seen May 28, 1990



Thank to Jeff, Mike & Ed for sending their DX fotos. DAVE

Danny Buntin 1312 N. Skyline Stillwater, Ok 74075

SEPTEMBER 1990

NEW DEADLINE: the 14th
SOUTHERN FM DX IS FOR REPORTERS FROM: AL, AR, AZ, CA, CC, DC, DS, FL, GA, HI, KS, KY, LA,
MD, MO, MS, NC, NM, NV, OK, SC, TN, TX, UT, VA & WV.

#### TROPS DOWN WHILE ES CONTINUES DURING JULY

Doug Allen W2CRS, P. C. Box 5646, Woodland Park, CO 80866 Equipt: Kenwood KR-S010 receiver with modified IF, crossed yagis at 20'. All DX from Divide, 3 miles west of home QTH. All local time. 7/6 Es 6/27 Es 93.1 CA Los Angeles, wx, traffic 0947 KODJ 0900 WLAF 94.5 KY Lexington, "Power 94.5" 0952 <u>KEWB</u> 94.3 CA Anderson, "B94" 0943 KRJY 96.3 MO St. Louis, ads, promo 0952 KMGX 94.3 CA ID, mixing with above, ? 0947 WLBH 96.9 IL Matoon, ID, "stereo 97" 1000 kLON 88.1 CA Long Beach, ID 0949 WENS 97.1 IN Shelbyville, "Lite Rock97 1005 kFYE 93.7 CA Fresno, "Y94" 97.7 OH Oxford, wx 0952 WOXY 1311 KNAN 106.1 LA Monroe "Magic 106" 97.7 o/u WOXY "the country giant" 0953 ? 1313 KIJO 104.1 LA Monroe, ads 0958 WLV4 96.3 OH Columbus 1819 KZMZ 96.9 LA Alexandria, "Power 96.9" 1320 WEZB 97.1 LA New Orleans, "B97 FM" 0959 WQLK 96.1 IN Richmond, "K96 FM" ads 1326 WBVR 101.1 KY Russelville, K "the beaver" 1000 WLQI 97.7 IN Rensselaer, ID 1335 WAMZ 97.5 KY Louisville 1000 WHMS 97.5 IL Champaign, ID 1337 WRBTt 94.9 IN ? new station?? 1002 WPkO 98.3 OH Bellefontaine, ID 1338 WLAP 94.5 KY Lexington, ads "Power 94.5" 1003 WCJCt 99.3 IN Van Buren, "in Jonesboro 1342 WRAY 98.1 IN Princeton, ID we're K99.3' 1350 WIL-FM92.3 MO St. Louis, ID 1005 WAJK 99.3 IL La Salle, ID 1008 WBNO 100.9 OH Bryan, local nx, wx 1400 WLHN 97.9 IN Anderson, ID 1402 WBYZ 94.5 GA Baxley, ID, "Z94" 1012 WTTF 103.7 OH Tiffin, ad 1018 WELL 104.9 MI Marshall, ID 1405 WBZM 94.3 IL Chillicothe, ID 1020 WIQB 102.9 MI Ann Arbor, ads 1449 WPCH 94.9 GA Atlanta, ID 1022 WXLC 102.3 IL Waukegan, ads 7/11 Es 1220 ? 93.7 TN? "all oldies B93.7" 1024 WCUZ 101.3 MI Grand Rapids, "CUZ 1230 WKLR? 94.5 TN? "KLR Clear 94" 1044 WILV 94.9 WI Baraboo, ads 1059 CBON18t 88.1 ON Sault Ste. Marie, FF 1248 WDEF 92.3 TN Chattanooga, ID 1249 WYNO 92.3 TN Milan,ads 1100 WGNV 88.5 WI Milladore, "Wisconsin's Good News Voice" 1300 WMBW 88.9 TN Chattanooga, wx 7/4 Es 7/12 Es 1520 KWGC 94.5 MO Poplar Bluff, ads 1108 WGFA 94.1 IL Watseka, ID 1522 WWMS 97.5 MS Oxford, "Miss 98" 7/6 Es 1525 WSM 95.5 TN "Nashville 95 FM" 0943 KFAC 92.3 CA Los Angeles, ID 1530 KCTT 97.7 AR Yellville, ID

The lightening strike probably totaled my Denon tuner on July 6. My only DXing until recently has been at my store in Divide. Around July 10 I bought a TX-9800 at a Colorado Springs pawn shop for \$100. I replaced 4 of the ceramic filters with 150 kHz filters but found the sensitibity to be dismal. August 6, I re-replaced two of the 150 kHz filters with the original ones. The tuner is working very well now. I think the problem was probably a solder bridge rather than a defective ceramic filter. (I think so , too.) Anyway, I'm back to tropo DXing from the home QTH again. In the meantime, I was given a heathkit AR-1650, which lost its amplifier section. It appears to be a pretty good tuner unmodified. If anyone has used the AR-1650, I'd appreciate your comments. It has wide/narrow IF selection, but the ceramic filters used in the narrow mode are unlike the filters used in most tuners. Does anyone know if there is a better replacement for the original filters?

Other than the Es in late May-early June, the season was disappointing, much worse than last year. Ny FM station goal for the year was 700, but I'm only at 630 with the Es season virtually over. Hope others had better luck.

Thanks to Matt Sittel & Greg C. for help with some PA & NC unIDs and to Todd Brandenburg (send your reports in to Danny, Todd) for the help with my 106.1 unID which is new station, KMA-FM, in Shenandoah, IA. 73.

Fred Laun, K3ZO, 5801 Huntland Road, Temple Hills, MD 20748
Equipt.: Denon TU-800 tuner, Winegard Antenna @35'
7/19
7/19
8/100 Fred Laun, K3ZO, 5801 Huntland Road, Temple Hills, MD 20748

0830 WRCH 100.5 CT New Britain 0835 WJB 99.5 DE Wilmington (Overriding local WGAY) 7/19
0840 WQQQ 96.7 CT Stamford
"The All-NewQ 96.7 FM" - note call letter change.
0844 WFME 94.7 NJ Newark
(Overriding local WLTT)

SOUTHERN FM DX

SEPTEMBER 1990

Chris Johnson, 6235 Rosewind Cv., Memphis, TN 38141 Equipt/: GE Superadio II, whip antenna. Times are Eastern (Should I be reporting in my own zone--central?) (Why report in Eastern? DB) 1910 WKYQ 93.3 KY Paducah, ID, ads 1802 KMGN 93.9 AZ Flagstaff, "Northern Arizona's KMGN" 6/30 tr 0155 KISR 93.7 AR Ft. Smith, "Kisser 93.7" 1803 KILO 93.9 CO Colorado Springs, IDs. wa hard rock 0156 WXOQ 105.5 TN Selmer, "105.5...XOQ" 1842 KSPZ 92.9 CO Colorado Springs, ad, IDs 1920 KTCL 93.3 CO Ft. Collins,ads 7/1 tr 0146 WRMX 96.3 TN Murfreesboro, "Mix 96" 2009 KRAI 93.7 CO Craig, uc mx, CART ID I wish I'd have gotten home from work(or been off) sooner on 6/28! This stuff just whet my appetite! "Ive got a Radio Shack 6-element waiting to be attached to my Kenwood KR-80 but have not been brave enough to bear that hot roof yet! I've been reading quite a bit in the VUD about filter mods for selectivity. Can anything be done for sensitivity? 73's William P. Townshend, 4500 Connecticut Ave, NW, #901, Washington, DC 20008 Equipt.: Portavision-40 receiver 7/19 tr 0845 WYSP 94.1 PA Philadelphia 7/18 tr 0809 WMMR 93.3 PA Philadelphia, r 0908 WKXW 101.5 NJ Trenton 7/19 tr 0835 WKSZ 100.3 PA Media, Kiss-100 Gus Mancuso 5615 Inwood St., Hyattsville, MD 20785 Equipt.: Pioneer SX-40 except Radio Shack DX-440 from Gaithersburg (ph. 301/773-3072) 7/4 tr of adj. ch. int. on car radio coming home from 0630 92.1 WXZY VA Ruckersville, another work, so I knew enhancement was up all Philly's unusual "overland" opening, (see earlier and Del. strong. 7/22 tr (From Gaithersburg(see 9/89 VUD) report) this time west. Noticed on 103.1 WCUL 65 miles west overriding WBEY 35 miles 2123 100.7 WQPO VA Garrisonburg, tough null on east(15 of which are over water). semi-lcl WGRX 0714 105.3 WDAS PA Phila. 2129 100.5 WOMP OH Bellaire, better humidity 7/10 tr than trip here last mo., but enhancement no 2315 90.3 WDIH MD Salisbury, noticed lots Keith D. Pugh, 227 Martin St., New Hope, AL 35760 Equipt.: McIntosh MR-78, Probe 9(Onkyo T-9090 on 7/18 & 7/19) 1936 WBNS 97.1 OH Columbus, ID 7/7 Es 7/3 tr 1936 WBNS 97.1 OH Columbus, ID 1214 KBUY 93.5 NM Ruidoso, "K-by" 1215 KSEL 95.3 NM Portales, ads 7/6 Es 7/8 Es 0907 Monterrey strong, MUF 104.5 1345 unID 90.3 ment. "Mars Hill, g 0930 XHRYSt90.1 TA Reynosa 1346 WKSTt 92.1 ON Timmins, ads 0936 XHAAA 93.1 TA Reynosa Estereo Requerdo 1528 WBEE 92.5 NY Rochester, k, ID 0942 kBNL 89.9 TX Laredo, SS 1536 WLMI 103.9 PA Kane, ID 0954 unID 99.5 "Estereo T'empo, SS 1544 CHEZ 106.1 ON Ottawa, "Shay 106" 1004 KKED 90.3 TX Corpus Christi, "90-FM" 1546 WPIG 95.7 NY Olean, "The Pig 95.7" 1009 KNFM 104.9 TX Premont, SS, \$, ID 1552 WCIB 101.9 MA Falmouth, ID, Lite 102 1020 XHMN 107.7 NL Monterrey, r, 1cl ads 1554 WFXR 93.5 MA Harwich Port. "Fox Radio" 1021 KFLZ 107.1 TX Bishop, SS, ID, mono 99.3 RI Block Island, r. ID 1557 WHFM 1024 KBIC 102.3 TX Alice, k,ID 95.3 NY Southampton, "95-3 HFM" 1033 KOPY 92.1 TX Alice, k,ID 1559 WJFD 97.3 MA New Bedford, SS-EE, ID 97.9 TX Beeville, \$, r, ID 1600 WLNG 92.1 NY Sag Harbor, ID 1040 KEPG 100.9 TX Victoria, \$, ID 1610 WHJY 94.1 RI Providence, "94-HJY" 2030 WRJO 94.3 WI Eagle River, ads 1045 XHMG 102.9 NL Monterrey. "Romantica Mg" 2034 CBLJt 88.3 ON Wawa 1057 XHNk 99.3 TA Nuevo Laredo, "\$ Ridmo" 2035 CBQYt 98.9 ON Nipigon 1101 XHSAB 89.5 NL Sabinas Hidalgo, ID, 2040 CFNO 93.1 ON Marathon, r, ID "R. Napolion" 2100 CBLJ 89.1 ON Geraldton, "CBC Radio" 1136 XHJk 98.9 NL Monterrey, "Energy 99" 2123 KMCM 92.5 MT Miles City, ID 1257 KCRB 88.5 MN Bemidji, "MN Pub. Radio" 2133 WJFD 92.3 MI Ishpeming, ads 1300 WHSA 89.9 WI Brule, ID 2143 CJSD 94.3 ON Thunder Bay, "94-FM" 1002 XHAAA 93.1 TA Reynosa 1348 kWBI 91.1 CO Morrison 1018 KYTX? 92.1 TX Devine, "Big Tex Radio" 1631 KHSD 97.1 SD Faith 1020 KOYE 94.9 TX Laredo, ads 1638 KRCS 93.1 SD Sturgis, ads 1023 XET 94.1 NL Monterrey, "Super E'ta" 1641 KSDZ 95.5 NE Gordon 1043 KDLK 94.3 TX Del Rio, ads 1705 KLXS? 95.3 SD Pierre?, "Classic 95" 1145 KNFM. 92.3 TX Midland, ads 1727 KVSR 97.9 SD Rapid City, 1cl. ad, g 1205 XHH 100.7 CH Ciudad Juarez, "Mariachi \$" 1732 KMCM 92.5 MT Miles City, "KM-92" CONT. .

SOUTHERN FM DX	Pugh, cont. SEPTEMBER 1990
7/11 Es	7/19 Es
2036 KQDY 94.5 ND Bismarck, "Kw-95"	1053 KTXT 88.1 TX Lubbock, r, ID
2040 KZPR 105.3 ND Minot, "Magic 105"	1100 KQLI 94.3 Ok Lawton, ID
2045 KCND 90.5 ND Bismarck	1109 KQIZ 93.1 TX Amarillo, ads
2047 KQAA 94.9 SD Aberdeen, ID	1201 kBCO 97.3 CC Boulder, ID
2109 kYYZ 96.1 ND Williston, "Laser 96"	1203 KBFI 105.9 CO Denver
2110 KGCH 93.1 MT Sidney	1203 KELN 97.1 NE North Platte, o, ID
2159 KZNA 90.5 KS Hill City, ID	1207 KATZ 99.5 KS Hays, ads, ID
2206 KYGO 98.5 CO Denver, k, ID	1211 kSID 98.7 NE Sidney
7/13 Es(brief)	1211 KKAZ 100.7 WY Cheyenne, "Z-100"
2147 KUNM 89.9 NM Albuquerque	1212 kDHT 92.5 CC Greeley, ID
7/18 Es	1237 KATR 98.3 CO Wray, city ID
1930 KDCH 88.5 IA Sioux Center, area wx	1242 KMOR 92.9 NE Scottsbluff, ID
1932 CITI 92.1 MB Winnipeg, "92-CITY-FW"	
1936 KQRS 92.5 MN Golden Valley, "kW-92"	" 1249 kKMk 9319 SD Rapid City, ID
1940 unID 97.5 "Star Station 97 1/2", r	1250 LRCS 93.1 SD Sturgis, k, ID
1941 kLXK 93.7 MN Minneapolis, r, ID	1252 KkJQ 97.3 KS Garden City (f/out 1254
1945 WYRQ 92.1 MN Little Falls, ID	1358 kalo 92.5 SD Sicux Falls, ad
7/19 Es	1359 KSDN 94.1 SD Aberdeen, ID
1047 KZOR 94.1 NM Hobbs, r, ID	1401 WTBX 93.9 MN Hibbing, r, ID
1051 KTZA 92.9 NM Artezia, r, ID	1431 KDCR 88.5 IA Sioux Falls, nx
1052 KPER 95.7 NM Hobbs, ads	1733 KRWG 90.7 NM Las Cruces
AND CONTROL OF THE CO	1738 KAMZ 93.1 TX El Paso, ads

Just as the Es was getting started on 7/18 the dial cord broke on the MR-78. Repaired it on 7/26 after borrowing a roll of dial cord from a friend. I didn't think I could fix it myself at first, but after looking at the service manual it turned out not to be too hard of a job.

There've been 20 days with FM Es for 1990 so far, still behind the previous 4 yrs. 28 days in '89, 24 each for '87 & '88 and 37 days in '86 with FM MUF. Can't complain about quality, which has been good this year. Maybe more to follow.

			Box 21421, 501C Sout					7607		-
Equipt.:	Yamah	a. T.	X-900U Modified, Radi	o Shac	k 6-el	ement	. FM au	nter	ma,FM amplifier, rat	
7/2 MS				- 1					Eden, "My 94.5"	152
1959 KHNE	89.1	NE	hastings, network ID	901					Augusta, network ID	205
7/3 tr					0900	WGNI	102.7	NC	Wilmington, ID	299
2137 WKDF	99.5	KY	Corbin, calls	94	0918	WLAP	94.5	KY	Lexington, "Power94.5	"162
7/4 tr	5-10 5-1			2000	0923	WQHY	95.5	KY	Prestonsburg, area ad	93
0559 WVPE	91.7	WV	Beckley, WV Pub. Radio	119	0955	WTCB	106.7	SC	Orangeburg, ID	224
0602 WPFE	105.9	OH	Middletown, ID	238					Loudon, calls	113
0619 WPAY	104.1	OH	Portsmouth, local ad	166	1003	WMXF	96.5	NC	Laurinburg, ID	204
0631 WQHY	95.5	KY	Prestonsburg, "Q 95"	93	1004	WGAP	95.7	TN	Maryville, local ref.	94
634 WINJ	105.9	WV	Mount Hope, calls	131	1007	WBVR	101.1	KY	Russellville	243
			Hindman, calls	71	1011	WXLK	92.3	VA	Roanoke, "K 92"	158
648 WQLA	104.9	TN	La Follette	90	Es					
659 WVTF	89.1	VA.	Roanoke, area wx	158	1059	KBNL	89.9	TX	Laredo, ID	1182
701 WFDE	88.5	NC	Winston-Salem, calls	130						1369
720 WLLK	102.3	KY	Somerset, calls	124						1184
303 WJLS	99.5	WV	Beckley, ID	119						1167
019 WKYC	93.3	KY	Paducah, calls	343						1166
109 WMXF	96.5	NC	Laurinburg, "Mix 96"	204						1055
133 WBVR	101.1	KY	Russellville, calls	243					711-101 MANAGEME	
7/5 tr					7/7 I	Es				
542 WYNN	106.3	SC	Florence, wx	219	1321	KLTG	96.5	TX	Corpus Christi	1055
545 WWDM	101.3	SC	Sumter, "Big DM 101FM"	'212	1529	KBAT	93.3	TX	Midland, "The Bat"	1174
554 WRHM	107.1	SC	Lancaster, calls, k	154	tr					
557 WGNI	102.7	NC	Wilmington, "103-GNI"	299	1530	WSRW	106.7	OH	Hillsboro, calls	203
559 WOUL	89.1	OH	Ironton, network -+	148	Es					
			Georgetown, "Power 98"	279	1546	KVRP	95.5	TX	Haskell, calls	1008
			Honea Path, local ad	137					Hobbs, local ad	1205
639 WHLZ	92.5	SC	Manning, "Wheels"	246					Artesia, "SE'n NM"	1271
648 WKQE	107.5	SC	St.George, "Q107"	250					Midland, calls, k	1174
			Sumter, ID	212						1116
			Macon, ID	257					Lubbock, "K Triple L"	
153 WBVR	101.1	KY	Russellville, area ad	243					Lubbock, ID	1116
/6 Es									Lawton, "Magic 95", II	
059 CBLG	89.1	ON	Geraldton,CBC wx	949					Portales, calls	1206
205 KQIZ	93.1	TX		1116						1116
7/7 tr		2879	BOOKSTATIANIST AT CASCOL I			KPLO				1044
754 WZST	102.7	VA	Appomattox, Star102-7	214	7/8 1		-50/155			UTCO(e)
)805 WBNI	105.5	TN	Oneida, local ref.	113		WREK	91.1	GA	Atlanta,ID	216
0810 WKDF			Corbin, "KD Country"	94	CONT					

SOUTHERN FM DX	Sittel.			SEPTEMBER	1990
7/8 Es 1512 KBTS 93.3 TX Killee			102.7 NC	Wilmington, "GNI"	299
1518 KTYL 93.1 TX Tyler, 1542 KGLS 93.1 KS Pratt,		the Warter Co.	102.7 WV	Charleston, "Super 102"	144
1547 KJCK 94.5 KS Juncti 1553 KYEZ 93.7 KS Salina 1602 WIRR 90.9 MN Virgin	857	7/16 tr 0559 WRJA 0559 WVTF		Sumter, network -+ Roanoke, calls	212 158
1604 KZPS 92.5 TX Dallas 1605 WJMQ 92.1 WJ Clinto	nville,calls 653	7/17 tr 0558 WRJA 0559 WLTR		Sumter, network -+ Columbia, network -+	212 187
1621 CHIQ 94.3 MB Winnip 1622 KNIN 92.9 TX Wichit		0629 WQSM		Fayetteville, calls	224
1630 KFQX 102.7 TX Merkel 1632 KEAN 105.1 TX Abilen	,"Fox 102 FM" 1038 le,"Kean 105",k1026	0632 WGSQ 0659 WLJK		Cookeville, local ref. Aiken, ID	168 204
1643 KXXY 96.1 OK Oklaho	ma City,"KXY",k837	7/18 tr	00 1 00	Comban materials 1	212
1649 KQIZ 93.1 TX Amaril		0558 WRJA 0559 WLTR		Sumter, network -+ Columbia, network -+	187
1652 KSCS 96.3 TX Fort W 1653 KBIL 92.9 TX San Ar	gelo."B 93" 1088			Buford, calls, oldies	180
1705 KDGE 94.5 TX Gaines	sville,rp 853	0656 WDEN	105.3 GA	Macon, local ref. Fayetteville, calls	257 224
1707 WBVR 101.1 KY Russel	lville,wx 243	Es 2028 unID			
1708 KRJT 100.7 TX Bowie,		7/19 tr		221 4 4 4	000
1733 KCLI 95.3 OK Clinto			105.9 OH	Middletown	238
2051 KOHU 104,1 SD Yankto		7/21 tr 2339 WAIV	102.7 SC	New Ellenton, calls	213
2059 KQLI 94.3 OK Lawtor 2059 KMGZ 95.3 OK Lawtor	150000	7/23 tr	10217 00	new Directions, control	
tr 2117 WPFB 105.9 OH Middle			89.1 NC	Fayetteville, calls	224
2120 KQIZ-93.1 in again (		2001 WYCQ	102.9 TN	Shelbyville	230 216
Es	n-1- "VT 02" 1090	2201 WAPW 7/24 tr	99.7 GA	Atlanta,ID	
2141 KKXL 92.9 ND Grand 2144 KNOX 94.7 ND Grand	Forks, "Cool" 1089		88.1 SC	Sumter, network -+	212
2201 CKSB-9 89.1 ON Fort		0659 WVPB		Beckley	119
2202 CBQT 90.5 ON Fort I		0659 WVTF			158
2202 CFQX 104.1 MB Selkin		on 7/25	new filt	ers put in tuner	
2206 KKWQ 92.5 MN Warroa		7/26 tr			-o-any
7/9 tr				Jamestown, local ref.	134
0548 WKQB 107.5 SC St.Geo	orge,"Q107" 250			Rocky Mount	267
0550 WQLA 104.9 TN La Fo.		0600 WTHP		Thomasville, ID, oldies	219
0553 WBPR 97.7 SC George		0601 WQDR		Raleigh,nx Jamestown	134
0559 WRJA 88.1 SC Sumte: 0627 WSKZ 106.5 TN Chatte		2059 WTHP		Thomasville,ID	142
0628 WDEN 105.3 GA Macon		2201 WSGE		Dallas,ID	107
0629 WAGO 104.7 GA Athen:	s,"Lite Rock1047"175	7/27 tr			
0630 WYAV 104.1 SC Conway	y,"Wave 104" 265	0554 WVSR		Charleston	144
0631 WGNI 102.7 NC Wilmin	ngton, "103-GN1" 299	2159 WKDB	91.3 NC	Asheville,-=	74
0637 WGSQ 94.7 TN Cooke		7/29 tr		AND A STATE OF THE	120232
0659 WFSS 89.1 NC Fayet		7/30 tr		Reidsville,"102 Jams"	159
0549 WWXL 103.1 KY Manch 0552 WLAP 94.5 KY Lexin		0931 WQSM 0935 WSCZ		Fayetteville	224 156
0558 WRJA 88.1 SC Sumte				Greenwood,calls,k Gadsden,ID	258
	bia,network -+ 187			Newberry, "Mix 106"	158
0631 WTCB 106.7 SC Orang		1159 WDEH		Sweetwater	124
0633 WZYP 104.3 AL Athen	s,"ZYP" 274	7/31 tr	,0,5 11,	DWCCCWGCCI	
0634 WBVR 101.1 KY Russe	llville,"Beaver" 243	0813 WECO	101.3 TN	Wartburg, calls	119
0637 WHLZ 92.5 SC Manni	ng,"Wheels" 246	0824 WAJY	102.7 00	New Ellenton, local ad	
0640 WAGQ 104.7 GA Athen	s,traffic report 175			Rockmart, "South 107"	220
0659 WLJK 89.1 SC Aiken	SCERN ID 204	0825 WNMX			158
7/11 tr 0551 WTCB 106.7 SC Orang	eburg, "B 106" 224			Somerset, "Lake 102"	124
				Sumter, "Big DM"	212
0622 WKDP 99.5 KY Corbi	11,10001 1011	0906 WQMG 0958 WPLN		Greensboro, "Power 97" Nashville, calls	152 246
1738 KSPZ 92.9 CO Color	ado Springs 1230	1000 WLTR		Columbia, ID, in \$!	187
1815 KMOR 92.9 NE Scott		Es Es	,		231
tr		1739 KTSR	92.1 TX	College Station	891
2030 WZYP 104.3 AL Athen		1741 KQFX		Georgetown, "Oldies967	
2032 WQSM 98.1 NC Fayet	teville 224	1742 KAPT	94.7 TX	Luling,"The k Cat"	998
7/12 tr	CONTRACT NAME OF THE PARTY OF	1744 KAJA			1053
0659 WFSS 89.1 NC Fayet	teville,ID 224	1745 KHFI	98.1 TX	Austin, local ref.	981

SEPTEMBER 1990 Dyer, cont.

SEPTERBER 1990 SOUTHERN FM DX SOUTHERN FN DX Sittel, cont. July lacked in B-skip activity, as there was not much heard. Thanks go out to John Tudenham and Todd Brandenburg for their help in IDing stations that I heard. John says my "Power 105.7" is kMCk, Siloam Springs, AR. Todd helped me out on my "Q-96", IDing it as kQNS 95.9 KS Lindsborg. Thanks to both of you!!!

On July 25th I modified my Yahmha tuner, changing the filter sequence for 210-210-180-180 to 210-210-150--110. As you can see it worked! The day after I did it I heard my first ever stations on 98.3 and 96.7. Much thanks to Eill Burrows for his advice. 73's.

Christopher S. Dunne, 21500 John	nson St., Bo	x 533, Pembroke Pines, FL 33029
Equipment: Ga Superadio II mod	. w/ 150 fil	ters, R. Shack antenna, Pioneer carradio
7/19 Es		7/30 tr?
1112 ?? 93.5 (1)		
1128 WKBQ 106.5 MO Granite City ment. St. Louis	, 970	" WFIIt 91.7 St. Pete, sounded 170 like ID
1141 WKLA 94.5 MI Holland "KLA"	" 1130	(1) I heard "Gold Rush" and calls
?? KARL 93.7 IA Carroll, ID	1305	sounded like Auak. any ideas anyone
?? WLEW 102.1 MI Bad Axe, S. Tyler was DJ	1170	and "Magic 95.1". Is that WALT (IN)?
1209 CIMXt 88.7 ON Windsor, "88.7 The Mix"	1070	(3) Is WKLT & 97.5 or .7? The 800# didn't work in FL!
?? WJML 98.9 MI Petoskey,	1280	(4) Ments. of Shreveport wx w/ record highs & lows in city's history.
1226 WKĹŤ (3) MI Kalkaska, "1-800-968-WKLT"	1245	(5) Ment. "Classic Book" &
7/29 Es*		Carrer ment. "U said one chance of
1807 KISX 107.3 TX Whitehouse,	930	rain? (It's pouring) in Arlington!" Gotta be KZFS Dallas.
ment. Tyler, wrestling ad 1824 KPLX 99.5 TX Ft. Worth, "K-Plex"	1070	(6) will has yet to move to 92.9 as yet. WZZR hard to null - 50,000w right?
1825 WRR(t)101.1TX Dallas, c mx, ment. DFW area	1030	*1st 6 stns on 7/29 caught w/Super- adio whip, the other 4 in the car.
1828 KSCS 96.3 TX Ft. Worth, IL	1070	W. t
1833 KBTSt 93.3 TX Killeen, "11 Hot Hits, B-93-FM"	1060	Muchas gracias to all who gave me the info on my unIDs in my last report.
1835 KKDAt104.5 TX Dallas, SLOW jingle "K-104"	1030	Hey, that's what the club's all about, right? If any of you have unIDs that seemed to come from south FL, drop me a
1839 KVNE 89.5 TX Tyler, ID	945	line. I may be able to help w/ Latin Amer. unIDs or Caribbean unIDs. If
1840 KVTT 91.7 TX Dallas, ID	1030	possibly Colombian unIDs, I have a list
1845 ?? 92.5 (5)		from last year; same w/ Honduras (that will B tuff 'cause they're no more'n
7/30 Tr?		5000 watts).
?? WVIJ 91.7 FL Pt. Charlotte Scott wesley Brown promo38	112	I still need info on my unID 96.7
" WLLM 92.7 Punta Gorda, b/I haven't heard since 1975!	D, 106	from Alpena MI "silver 97". Anybody? As they say in Rome, LXXIIIs

2? WVIJ 91.7 FL Pt. Charlotte, 112 Scott wesley Brown promo385w WWLM 92.7 Punta Gorda, b/ID, 106 haven't heard since 1975! (6)	I still need info on my unID 96.7 from Alpena MI "silver 97". Anybody As they say in Rome, LXXIIIs
Pat Dyer, 5315 Silvertip Dr., San Antonio	, TX 78228-2744
6/1 Es 0813 WAIR 92.5 MI Atlanta 0823 WZLQ 98.5 MS Tupelo	0959 WJNR 101.5 MI Iron Mountain 1006 WHWL 95.7 MI Marquette
0826 WKHQ 105.9 MI Charlevoix 0827 WGFM 105.1 MI Cheboygan 0831 WHSH 107.7 MI Alpena 0833 WYSY 107.9 IL Aurora 0835 WAFL 105.7 WI Appleton 0839 IJX 108.6 IL Jacksonville 0844 WVVX 103.1 IL Highland Park WKFR 103.3 MI Battle Creek 0849 IJKK 108.7 IL Kankakee 0852 WCUZ 101.3 MI Grand Rapids	1038 WVKS 92.5 OH Toledo 1041 CJBX 2.7 ON London 1054 WIAA 88.7 MI Interlochen 1058 WENN 88.5 IL Pedin 1100 WUWM 89.7 WI Milwaukee 1103 CBLJ 88.3 ON Sudbury 1106 WAUN 92.7 WI kewaunee 1115 WTFX 94.1 WI Watertown 1116 WOLX 94.9 WI Baraboo 1126 WOZZ 93.5 WI New London
0856 WXRT 93.1 IL Chicago 0900 WVGR 104.1 MI Grand Rapids 0901 WQLR 106.5 MI Kalamazoo 0942 WWQM 106.3 WI Middleton 0949 WQLH 98.5 WI Green Bay 0951 WRUP 103.3 MI Marquette 0953 KJJK 96.5 MN Fergus Falls	1128 WYCO 107.9 WI Wausau 1133 WDOR 93.9 WI Sturgeon Bay 1138 WIAL 94.1 WI Eau Claire 1139 WWIB 103.7 WI Ladysmith 1204 WTBX 93.9 MN Gibbing 1206 KMFY 96.9 MN Grand Rapids 1225 KYCK 97.1 MN Crookston cont

1241	DAL	95.7	MN	Duluth St. Paul
1245	OME	92.3	OH	Cleveland Heights St. Catherines
1252	CHTZ	97.7	ON	St. Catherines
1321	WMXD	92.3	MI	Detroit
1329		98.9	OH	Van Wert
1337	NWN	98.5	MI	Coldwater
1338	NJ LB			Detroit
1759	KNTO	93.5	TΔ	Ladysmith Mason City
1824	WAVC 1	05.1	MN	Mason City Duluth Charleston
1900	WVPN	88.5	WV	Charleston
1902	k CRB	88.5	MN	Bemidji
1909	KKWQ	92.5	MN	Warroad
1932	K DDR	92.3	ND	Warroad Oakes Aberdeen Jamestown
1937	KSDN	94.1	SD	Aberdeen
1941	KQDJ	95.5	ND	Jamestown
2000	WWNK	94.1	UN	Gincinnati
2005	KLZY	92.5	WI	Powell Ronan
	KQRK	92.3	MI	Ronan
2010	MINITE	97.9	MIT	Bozeman
2010	K ODB	94 1	MT	Butte
2022	KTAK	93.9	Wv	Riverton
2030	CKUA	93.7	AT	Butte Riverton Calgary Casper Billings
2032	KTRS	95.5	WY	Casper
2041	KRKX	94.1	MT	Billings
2043	KTMN	90.5	M.T.	2Uet roan
1046	KQKS	104.3	CO	Longmont
2049	KBPI	105.9	CO	Denver
2058	KYGO	98.5	CO	Denver Sheridan
2113	KROE	94.9	MI	Loadville
2120	LIGHT.	9J.J	NC	Leadville Lexington
2137	MKBB	92.31	VC	Asheboro
2153	WFDD	88.5	NC	Winston-Salem
2159	WRVL	88.3	VA	Asheboro Winston-Salem Lynchburg
2213	WWWO	93.5	IN	Hartford City
	WKHY	93.5	IN	Lafayette
2220	WXGT	92.3	OH	Hartford City Lafayette Columbus
2230	WNDH	103.1	OH	Napoleon
2232	WZZP	103.9	IN	South Bend
				Mansfield
2392	WPAY	104.1	OH	Portsmouth
2307	WYCA	92.3	IN	Hammond Champaign
2313	WLRW	94.5	IL	Unampaign
2321	MAMT	101: 1	MI	Petoskey Madison
				Madison Oshkosh
6/3		20).9	15.4	- Jane
		107.3	FI.	Jacksonville
				La Grange
0230	WYSH	107.1	GA	Rockmart
0734	WCOS	97.9	SC	Columbia Milan Troy
0737	WMOG	104.9	GA	Milan
0743	ITOI	108.9	AI	Troy
	TABL	100.5	438	Albany
0751	WKSI	98.7	NC	Greensboro
				Knoxville
0804	WGIG	10/.1	NY	Paintsville
0806	WILL	96.5	CA	Paintsville Savannah
0800	MTMA	103.3	S	Cheraw
0821	MEDD	106.1	NO	Cheraw Durham
0824	WIBK	105.7	KY	Manchester
0825	WZNY	105.7	GA	Nanchester Augusta
0006	WRDX	106.5	NO	Salisbury
0020				
0828				Louisville Sauk City

, cont.				SEP
6/3 Es	01: 1 3	10	Udanton Colon	
0837 WINH 1	09.1	r T	Winston-Salem	
0039 INA 1	00 0 1	10	Jacksonville Burgaw Lisbon	
0030 WVB3	06.1	ID.	Lishon	
nosn wnix	94.9	IT	Baraboo	
0950 WOLX 0958 KFNW	97.9	VD	Fargo	
0954 KBHL 1	103.9 1	IN	Osakis Breckenridge	
1000 KLTA	105.1 M	IN	Breckenridge	
1002 WAIR 1007 GBCL 1010 WRRN 1013 KKWS: 1021 KCRB	92.5 (	NC	London	
1010 WRRN	92.3	PA	Warren	
1013 KKWS	105.9 1	MN	Wadena	
1021 KCRB	88.51	MN	Bemidji	
1755 WCEZ 1849 KKWQ 1858 WCHY 1921 KSDN 1925 KKOK	93.5	SC	Columbia	
1849 KKWQ	92.5 1	MN	Warroad	
1858 WCHY	94.1	A	Savannan	
1921 KSDN	94.1	PD	Morris	
1925 KKUK	9/ 1/	TETS.	Orlando	
1930 WWKA	78.5	DD.	Ciana Falle	
1931 KKRU	92.5	תבו	Voy West	
1951 MEON	88 5	PT.	Tomna	
TADA MUNT	88.3	SD	Brookings	
2002 MOZZ	93.5	WT	Orlando Sioux Falls Key West Tampa Brookings New London	
6/4 Es	11.1			
1103 KNPR	89.5	NV	Las Vegas	
1112 KYRK	97.1	NV	Las Vegas	
1112 KYRK 1113 KMGN	93.9	AZ	Flagstaff	
1115 KLUC	98.5	NV	Las Vegas	
1122 KCEP	88.1	NV	Las Vegas	
1115 KLUC 1122 KCEP 1123 KUNV 1255 KIQZ	91.5	NV	Las Vegas	
1255 KIQZ	92.7	WY	Rawlins	
6/5 tr				
2113 KYDR	93.3	TX	Port Arthur	
2140 WCKW	92.3	LA	Laplace	
6/6 tr				
0495 WQST	92.5	MS	Forest	
0413 KYKS	105.1	TX	Lufkin Little Rock	
0424 KABF	102.0	AH	Little Rock	
0432 <u>KMLA</u> 0436 <u>KLLI</u>	103.9	ALL	Ashdown	
OHJO VIII	92.9	TV	Hooks Carthage Paris Nacogdoches Alexandria Alexandria Pine Bluff Sulphur Spring Fort Arthur Greenville Odessa Jackson	
ONLY KOAN	93.0	TY	Parie	
O4451 KICS	103.3	TX	Nacogdoches	
0454 KOTD	93.1	LA	Alexandria	
KLSA	90.7	LA	Alexandria	
0508 KIPR	92.3	AR	Pine Bluff	
0514 KDXE	95.9	TX	Sulphur Spring	SS
0516 KHYS	98.5	TX	Port Arthur	
0519 KIKT	93.5	TX	Greenville	
0532 KGEE	99.9	TX	Odessa	
0534 WJMI	99.7	MS	Jackson Texarkana	
0.213 KKVR	102 5	0.14	Terarkana	
0719 KLAZ	105.9	AR	Hot Aprings	
0726 <u>KPXI</u>	100.7	TX	Hot Aprings Mount Pleasan Jacksonville Tyler	t
0732 KOOI	106.5	TX	Jacksonville	
0740 KNUE	101.5	TX	Tyler	
O/O ES				
			Los Angeles	
	94.1	DO	San Diego N Tijuana	
1001 XHRM 1002 XHJC	94.5	BO	N Tijuana N Mexicali	
1002 KHTI	95.1	V.	Yuma	
tr	27.1	114		
1009 kQTZ	105.9	OF	Hobart	
Es .			0.500	
1059 WFCH	88.5	SC	Charleston	
6/9 tr	- 5			
0659 KIPR	92.3	AF	Pine Bluff	
cont				

SOUTHERN FT	1 DX		Dyer, cont.		SEPTEMBE	179
6/13 Es	QA 1 110	Salt Lake City	1512 WTNT	94.9 FT	Tallahassee	
1213 KLUI	94*1 01	Calt Take City	1521 WMTM			
1210 KCPX	70.7 UT	Salt Lake City				
1218 KUSU				93.5 CA	Hazlehurst	
1219 KRPN 1	107.9 UT	Roy	6/22 Es	0.07 (2007)	E 1	
1220 KZHT	94.9 UT	Provo	1225 WPEC	97.9 NC	Concord	
1222 KJYE	92.3 CO	Grand Junction	1237 WUAW			
KLZX	93.3 UT	Salt Lake City	1405 WGWG	88.3 NC	Boiling Springs	
1225 KBZN	97.9 UT	Ogden			Okolona (ms)	
12/14 Es						
	RO 5 NT	Williston	6/23 tr			
			0030 WCKW	92.3 LA	Laplace	
1523 WSTD	90.9 MI	Standish	0320 KTXB	89.7 TX	Beaumont	
6/15 Es			Es			
0923 XHRJ	92.5 MX	Toluca	1951 WKRR	92.3 NC	Asheboro	
tr			1954 WXIK			
1148 XHSRO	92.5 Mon	terrey	2001 WPVR			
1336 KNFM						
Es	37.3			00.3 VA	Lynchburg	
1401 KXTZ	Oli 1 MU	Handerson	6/25 Es	1070 1277-005		
1401 KAIK	DO C MIL	Tender son	1215 WCMQ	92.3 FL	Hialeah	
1401 KLUC	90.5 NV	Las Vegas	1216 WAYJ	88.7 FL	Fort Myers	
1409 KWYK	94.9 NM	Aztec	1220 WLVE	93.9 FL	Miami Beach	
1411 KRST	92.3 NM	Aztec Albuquerque	1252 WWK A	92.3 FT.	Orlando	
1412 KRAZ	96.9 NM	Farmington	1250 WITH	89.7 FT	Orlando New Smyrna Beach	
1431 KYJE	92.3 CO	Grand Junction	16/11 1/77	BB F DV	Okolona	
6/16 Es	350100000000000000000000000000000000000		1041 WJ 15	17 (*00	Okolona Charleston	
1053 WGNV	88 5 WT	Milladore	1645 WYFN	88.5 WV	Charleston	
	00.5 "2	TAXABLU C	1701 WYGA	92.3 IN	Hammond Allendale	
tr	00 2 TA	Tanlass	1715 WGVU	88.5 MI	Allendale	
2131 WCKW			1728 WGNV	88.5 WI	Milladore	
	93.3 TX	Port Arthur	1729 WJPD	92.3 MI	Ishpeming	
6/17 Es			1740 KOEL	92.3 IA	Ishpeming Oelwein	
0221 KNUE 1	101.5 TX	Tyler	1242 KTHE	93 5 MO	kirksville	
0228 KDAQ	89.9 LA	Shreveport	1748 WFMT	08 7 TT	Chiarma	
0238 KWRW						
6/18 Es	1818 CH CO.		1751 WJZQ	95.1 WI	Kenosna	
1754 WKRR	02 3 10	Ashahara	1755 WLUP			
1757 WKTC			1759 WDZQ			
	90.9 NC	GOTGSDOLG	1806 WBNQ	101.5 IL	Bloomington	
6/19 Es	rev v e5	2 2	1809 WSPL	95.7 WI	La Crosse	
1305 WCHY	94.1 GA	Savannah	1812 WOOD	105.7 MI	Grand Rapids	
1819 CJBX	02 7 ON	London	1814 WYSY			
1856 WOLX			1022 17440	ON O TI	West Plains Galesburg	
1930 WUBR	92.7 IL	Arlington Heights				
1932 WXRT	93.1 1L	Chicago Miles City			Bible Grove	
2003 KMCM	92.5 MT	Miles City			Milwaukee	
2010 KAML	96.9 WY	Gillette	1828 WMIL			
2017 KLZX	93.3 UT	Salt Lake City	1835 WQLR	106.5 MI	Kalamazoo	
			1838 WTPI	107.9 IN	Indianapolis	
2030 KZHT	94.9 UT	Provo			Newcastle	
2035 KKWZ	93.7 UT	Richfield			New Carlisle	
2037 KJYE	93.3 CO	Grand Junction	1842 WKIO			
2050 KLZY						
6/21 Es					South Bend	
	03 E ET	Relle Clade	1846 WLBC			
		Belle Glade			Kendallville	
1408 WCMQ	92.3 FL	nearean	1853 WKTT	103.1 WI	Cleveland	
1411 WAYJ	68.7 FL	Naples		93.9 ON		
1413 WEZY	94.1 FL	Lakeland			Cincinnati	
1415 WCVU	94.5 FL	Naples Safety Harbor			Petersburg	
1416 WYUU	92.5 FL	Safety Harbor				
1420 WNT.T	95.7 FT.	Clearwater	1010 WIED	93.7 UH	Gibsonburg	
		Fort Pierce	1918 WIBM			
			1919 WCDV	103.1 IN	Covington	
1427 WUSF			1922 WBYR	98.9 OH	Van Wert	
1431 WADA			1926 WKJQ	92.5 OH	Alliance	
1436 WYNF					Miamisburg	
1437 WWKA	92.3 FL	Orlando		93.9 MN		
1441 WFLZ						
		Daytona Beach		92.5 IA		
1450 WHTQ	96 5 17	Orlando			Grand Rapids	
				95.7 MN		
1459 WMNF					Golden Valley	
1502 WTLG					East Lansing	
1507 WZAZ		Green Cove Springs	6/26 Es			
		Don't Mt To-			Control of the Contro	
1510 WMTO		Jacksonville	1929 WYST	92.3 MI	Baltimore, CONT	

SOUTH	HERN I	M DX			Dyer,	con	t.				S
6/26	Es					6/28					-
1039	WCVT	89.7	MD	Towson				102.1	TT.	Plano	
1045	WKYS	93.9	DC	Washington						Ladysmith	
				Milladore						Dundee	
6/27	Tes	00.5		TITTIBUOL 6		1643	MARKE	103.1	TT	Rockton	
0652	W.TPD	92.3	MT	Ishpeming							
tr		,2.0		TOTAL		1648	WAPL	105.7	WI	Appleton	
06 5R	KOXY	94.1	TY	Beaumont		1651	WKIH	96.5	WI	Milwaukee	
0000	KTYT.	93.1	TY	Tyler			WAJK	99.3	IL	La Salle	
0206	KEEP	92.3	TX	Tyler Marshall		1656	WYCO	107.9	WI	Wausau	
0708	KZMZ	96.9	T.A	Alexandria		1705	WFMX	105.7	NC	Statesville	е
0714	KUEZ	99.3	TX	Lufkin		1708	WWJO	98.1	MN	St. Cloud	
0726	KAKB	93.3	ΨX	Port Arthur		1711	MDAT	101 6	10.00	Dall of ah	
	acares.	12.7	4.44	TOLU AL GIAL		1714	MUMP	101.5	MT	Raleigh	
0228	Wk SIT	89.7	OH	Kent		1714	MOLA	77.7	NT	New berry	
				Hammond						Ironwood	
	WRRN			Warren		1721	MADU	102.)	LIT	Waukegan	
				Canton		1724	WMZK	104.1	WI	Merrill	
1400	NITE O	00 3	OH	Claveland						Wadena	
				Cleveland						Ironwood	
0074	MITTIN	90.9	OH	Van Wert						Waukon	
00.50	THIND	7/ • /	UT	St. Catherines				104.1			
00.00				Sturgeon Bay						Waterloo	
				Niagra Falls		1751				Mason City	
				Belcourt		2201	WJFM			Grand Rapid	is
		92.3								Washburn	
				Lisbon						Preston	
				Winnipeg						Spirit Lak	
				Winnipeg		1758	WLJY	106.5	WI	Marshfield	
1000	KDSU	91.9	ND	Fargo		1803	WTBX	93.9	MN	Hibbing	
6/28	Es					1809	KOEL	92.3	IA	Oelwein	
				Madison		1811	WKML	95.7	NC	Lumberton	
				Forest City		1815	KISD	98.7	MN	Pipestone Alexandria	
1547	WAKX	98.9	MN	Duluth		1823	KXRA	92.7	MN	Alexandria	
1549	MEAE	97.9	MN	Eveleth		1824	KILO	92.5	SD	Sioux Fall:	S
				Duluth			KSCR	93.5	MN	Benson	
1552	KJJY	92.5	IA	Ankeny		1827	KSDN	94.1	SD	Aberdeen	
1553	WLDY	92.7	WI	Ladysmith		1829	KFNW	97.9	ND	Fargo	
1554	WIAL	94.1	#I	Eau Claire			KKBJ	103.7	MN	Bemidji	
1556	KSTP	94.5	MN	St. Paul		1833	kQWB	98.7	MN	Moorhead	
1559	KQQL	107.9	MN	Anoka		1840	WHLZ	92.5	SC	Manning	
				Golden Valley		1859	WAGP	88.7	SC	Beaufort	
1601	ARIT	96.5	WI	Algoma			WACL			Ladson	
1606	WOTC	102.3	WI	Manitowoc		1900	WFCH			Charleston	
1608	WAVC	105.1	MN	Duluth		6/30	Es				
				St. Paul		0848	WCMQ	92.3	FL	Hialeah	
				Marinette						Windsor	
1615	WIXK	107.1	WI	New Richmond						Van Wert	
1618	WRHL	102.3	IL	Rochelle						Piqua	
				Madison						Anderson	
1623	WAHQ	105.9	MI	Charlevoix						Detroit	
				Harbor Springs			WWNK			Cincinnati	
1626	IRAC	108.7	WI	Racine			CKSY			Chatham	
1631	WTKM	104.9	WI	Hartford						Howell	
				kenosha		2022	WNWN	98.5	MI	Coldwater	
1634	WSJY	107.3	WI	Fort Atkinson					MT	Marshall	
1635	WYSY	107.9	IL	Aurora		2025	WUGN	99.2	MT	Midland	
				Traverse City						Sullivan	
				Janesville	. 3	2045	WBRC:	97.7	TI.	Effingham	
50	uipme	ent:	(ea)	istic TM-1001 tuner(v	with to	wo of	its	four T	F f	ilters renl	acc
June	1 wit	h 150	klis	units)fed into Allie	ed 426	audi	o amn	. Arch	er	6-31, at on	) ! (
Th	e IF	filter	t of	ange has probably res	batlu	in =	ome o	f the	95.	9 logginge h	eme
96.1	local	)etc-	Or	a "quiet" band with	weak	sions	ls th	e f11+	er	"ripple" co	n c
thous	hmi	stakir	w.	e.g., a 92.3 for a 92	2.1.	tc.	Tunin	e hae	to	be done a 1	1+4
OR SECTION AND ADDRESS OF	0.000		23			7. 7. 7. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		Cr .vinca	20	an anno a T	

replaced early on at 20' with rotor. ngs here(next to our e" can easily fool one though--mistaking, e.g., a 92.3 for a 92.1, etc. Tuning has to be done a little more carefully to avoid moderate distortion. (For full audio quality I can always go to "wide",

which bypasses the two 150-kHz units.)

There were several days here with simultaneous Es signals for the Carolinas and the Dakotas. There also seems to be a distinct "shortage" of things from AZ and CA this season though. 144 MHz Es NUF reached on June 1(MI, WI, II), 3 (W4, 8, 9, and MD), and

Good tropo in early June increased the TX(and AR)totals. The June 1 catch of Alberta was the first time since 1980 that I've gotten a new Canadian province. 73.

SEPTEMBER 1990

Danny Buntin, 1312 N. Skyline, Stillwater, Ok 74075 Equipt.: Pioneer TX-9100 modified with 3 180s & 1 150, Frobe 9 up 32 ft. with rotor. RG-6 7/18 Es 7/19 ds 1834 WCTH 100.3 FL Plantation key, ads. wx. 1249 WOWI 102.9 VA Norfolk "Catch FM" 1253 WKEZ 94.1 VA Yorktown 1256 WQHQ 104.7 MD Ocean City 1836 WSHE 103.5 FL Ft. Lauderdale. "103 She" 1259 WCFE 89.7 NC Raleigh 1849 WYSP 94.1 PA Philidelphia 1300 WUNC 91.5 NC Chapel Hill 1857 WAYJ 88.7 FL Fort Myers, "Way FM" 1130 1311 WGMD 92.7 DE Rehoboth Beach, calls 1200 7/19 Es 1354 WAMU 88.5 DC Washington 1213 WRNS 95.1 NC Kinston 1359 WPAR 88.1 NC Claremont 1218 WPVR 94.9 VA Roanoke 1403 WKYS 93.9 DC Washington, calls, r 1219 WOBR 95.3 NC Wanchese, "Beach 95" 1416 WDLX 93.3 NC Washington, "93 DCX" 1224 WOVE 98.7 WV Wheeling 1230 WQMX 94.9 OH Medina, calls 7/30 ex.gw 1231 WTOF 98.1 OH Canton 920 1940 kHAJ? 100.3 Ok Taft? "The Boss", S.r. 1240 WGH 97.3 VA Newport News, EBS test 2002 KAPH 100.3 KS Kingman, ID, \$

FINALLY, the tornado story concludes after leaving off in the July SFM:

I was trying to tune in the weather spotters on the scanner when all of a sudden the electricity went off. I figured the power outage was a dead giveaway that the tornado was indeed for real and somewhere in town tearing things up. Frightened enough now, I finally hid for safety, doing so in the hall braced behind a mattress. Within a minute. some pounding, roaring wind came up and lasted for a short period. After it was over the home seemed quite intact but a look out to the backyard revealed that the 40+ ft. cottonwood tree had uprooted and laid sprawled across the backyard, fortunately not the house. What laid on the house was my totaled Probe 9 antenna and 20 ft. of mast. And my Antennacraft GFM10 attached to a fence and used as a substitute was on the ground. Meantime. a number of dazed neighbors wandered around surveying damage elsewhere in the neighborhood, mostly minor destruction like downed tree limbs, gutters, and some sucked off shingles. I joined them, but soon a heavy shower drove everyone back in. As darkness fell ASPI radio reported traffic was backed up close to a mile at a major intersection. I guess sightseers were in a panic to see the damage before it got dark. Dead traffic lights did not help matters. I did not wish to join them. The next morning light revealed the tornado carved out a narrow but destructive path only a half mile from my house. High winds that radiated out from the path covered the whole town. If anyone like me had an antenna up on a rotor, it likely got blown down. Antenna destruction in Stillwater was not all that common since Stillwater isn't much of an antenna town. Reception from the OKC antenna farm doesn't demand an elaborate antenna set-up. Also the popularity of the nearly 40 channel cable system over the years has just about managed to make outdoor TV antennas obsolete. TV antennas sticking up are a rare sight these days, especially in the newer neighborhoods. I wouldn't be surprised if the rise of cable in small towns has kept many people from being introduced to the hobby of TV-FM DXing. Anyway, in the aftermath of the Stillwater tornado, my Probe 9 got replaced. Many homes and businesses damaged or destroyed are being built back looking as good as new, if not better than before. In reconstructing, one homeowner is adding a second story. The May 15th tornado was the first tornado to hit Stillwater in 15 years. Hopefully, more time than that can past before the next one.

In a different matter, Matt Sittel asked what DXing would be like in Norman, Ok. He may choose to attend the University of Oklahoma at Norman for graduate study in meteorology. I haven't done any monitoring to speak of in Norman, but it looks to be a better town for DXing than Stillwater. In Norman, the Tulsa stations would be much less of a problem. TV 2,3,6 look good for Ms. Dallas-Ft. Worth is probably still far enough away to not present much trouble. Also Norman has only one FM station and one translator.

And surely the Oklahoma City antenna farm is far enough away to not cause overloading up and down the dial. And of course, Norman is a good place to study the severe thunderstorms that start firing up in western Oklahoma in the middle of a spring time afternoon while hoping they settle down enough to decent levels before arriving in central Oklahoma by night, which isn't always the case as in the Stillwater tornado.

####

NORTHERN FM-DX

GREG CONIGLIO 5100 GLENWOOD DRIVE WILLIAMSVILLE, NEW YORK 14221

FOR DXers III: Catada, NY, PA, CT, RI, MA, ME, YT, NH, NJ, OH, MI, III, III, WI, MN, KS, NE, IA, SD, NE, MT, WY, OR, WA, ID, and AK. Log cutoff for October 1990 column is July 1, 1990.

DEADLINE: The 1st. Another big column this month, thanks to some good trops openings during the beginning of July. The NJ DXers did especially well on this opening: see their reports. However, skip has been dissappointing during the latter half of the season, although there were good openings in the last week of June, and July 8 and 19.....

THEFF FALCONER - BOX 63 - CLINTON, ON TARIO NOM 1LO

MAN TO THE PARTY OF THE PARTY OF		7.73.63	* * * * *
Equipment: Magnum Dynalab FT-101A E	tude	Stereo Probe 9 at 27 feet with rotor and RG	-110
coax. Magnum Signal Sleuth preamp.			
UNE 1990		0400 WEKU 88.9 KY Richmond, c\$, ID for WEKH	426
22 M S	5015000	0438 WVNS 96.1 WV Charleston, ro\$, ID	357
0936 CBAF26 88.5 NB Moncton, French talk	831	0440 WCOZ 96.7 KY Paris, very weak, WCOZ	
(153 mill) 91.9 ?? French talk (Perhaps this could	- 1	Cozy 96.7, CKGL in on top	396
have been CBF9 Mont Laurier, PQ-gc)		0445 WKQQ 98.1 KY Lexington, r\$, Double Q	415
		0559 WGUC 90.9 OH Cincinnati, c\$, ID	344
26 E# 2052 KLSU 91.1 LA Baton Rouge, \$, LSU promo	1056	1745 WDPR 89.5 OH Dayton, weather rpt\$	300
2058 WMMK 92.1 FL. Destru, k\$, "K-92"	949	1820 WBTU 93.3 IN Kendallville, k\$	251
2100 KPAE 91.5 LA Erwinville, g\$, Grace & Truth		8 Es MUF at least 197.9	
2100 KPAE 91.3 LA ELWHAME, 33, CHOCO CE TIME	1031	1541 WZEW 92.1 AL Fairhope, r\$, 92 Zoo	970
2106 WMEE 90.7 FL Orlando, c\$, ID	1031	1543 WBLX 92.9 AL Mobile, rs\$	966
2108 WOZX 94.3 AL Greenville, election results	851	1549 WRSA 96.9 AL Decetur, 6\$, Beautiful 97	687
stereo, "Q-94"		1552 WOEX 96.7 MS Gulfport, 15\$, Foxy 96	1009
2112 WMXQ 94.3 FL Riviera Beach, ID, "Palm Bea	11.42	1605 WHER 103.7 MS Hattiesburg, weather	949
County's best music"	1143	1605 WHER 103.7 MS Harriesburg, wester	1061
2121 KIEZ 96.3 LA Brusly, 6\$, ads	1061	1606 KKAY 104.9 LA Donaldsville, k\$, ID	786
2122 WZLM 97.3 AL Dadeville, ro\$,ID with	200	1608 WKBB 100.9 MS West Point, ads\$	1116
WDLK AM 1450	786	1611 KAIN 102.9 LA Crowley, g\$	
2133 KQKI 95.3 LA Bayou Vista, k\$, Quckie	1110	1620 milD 105.7 77 r\$, All hot K106 either KMCK of	i.i.
2135 KBAU 94.3 LA Galliano, r\$, Bayou 94	1105	WAKH	748
2139 WBLX 92.9 AL Mobile, ID\$, ads	966	1622 WGKX 105.9 TN Memphis, k\$, Kicks 106	
2241 WCTO 92.1 FL Venuce, k\$, contest promo-	1135	1624 WKJN 103.3 LA Hammond, wx, Cajun 103	1034
27 Es		1633 WKEU 97.7 GA Griffin, k\$, K-97.7	697
1702 WFCE 88.9 FL Turpon Springs, mono, nx, wx	£	1637 KZMZ 96.9 LA Alexandria, rs\$, Power 96.9	1050
sports, ID , STATION #1000 HEARD	1067	1639 WKLS 96.1 GA Atlanta, rs, 96 Rock	690
1703 WHS 88.1 FL Bradenton, g\$	1108	1649 WSB 98.5 GA Atlanta, r\$, B 98.5	690
1713 WCTQ 92.1 FL Venice, k\$	1135		
1726 WYUU 92.5 FL Safety Harbor, ro\$, U-92	1075		1162
1742 KTSR 92.1 TX College Station, r\$, Star 92	1230		1075
		1656 WHVE 102.5 FL Surgeota, r\$, ID	1330
28 GW 1602 WIDL 92.1 MI Caro, ro\$, moved from 104.9		1701 WKSJ 94.9 AL Mobile, k\$, 95-KSJ	966
1602 William 92.1 Wil Caro, 103, 100 ved from 101.		1705 WLUN 95.3 MS Lumberton, rs. U-95-FM	977
filling vacancy on 92.1 left when WLEW	88	1711 WMMZ 93.7 FL Ocala, r\$, Z-93.7	993
moved to 102.1	00	1744 KSBJ 89.3 TX Humble, g\$, that cloud was	
28 It	371	sure moving around	1228
1845 WJCH 91.9 II. Joliet, g\$, Family Radio		1749 WYUU 92.5 FL Safety Harbor, k\$, U-92	1075
1846 WFFK 91.9 KY Louisville, c\$, ID	431		952
30.Es		1752 WMMK 92.1 FL. Destin, k\$,	1056
1345 WIIS 88.1 FL Bradenton, g\$, mixing w/CBEE	2 1108	1800 WWNO 89.9 LA New Orleans, wx rpt	1030
JULY 1990		2146 unID 83.1 g5, MUF up to 107.9 again	930
1.Tr/GW		2159 KOEZ 92.3 KS Newton, ads\$	230
1400 [WXKR] 94.5 OH Port Clinton, ro\$, Toledon	2,	2200 KZOC 92.9 KS Osage City, r\$, Z-93, recent	
Classic Rock, ex WOSE, this is correct call	156	change from 92.7 (Jeff, are you sure it	
ZEs		said Z-93. Their slogan is KZ-93, k\$-g*)	862 -
1601 KNGM 91.9 KS Emporia, ID\$	862	2204 KXXY 96.1 OK Oklahoma City, k\$, KXY	1039
8 Tr		2210 KWOX 101.1 OK Woodward, k\$, K-101,	
0242 WFPK 91.9 KY Louisville, c\$, very strong	431	way over WRIF	1089
9244 WAMZ 97.5 KY Lousiville, k\$	431	2214 WCTH 100.3 FL Plantation Key, rm\$	
0329 WBZW 107.7 OH Loudonville, m, The Bross		Catch 100, another strange hop	1277
WDZW IU. / C/II Londontvine, in, The Error	216	2219 KRZZ 96.3 KS Derby, ro\$, from 95.9	949
Wooster's newest station	480		884
1334 WXBO 96.9 TN Bristol, k\$, great sig	+00	2236 KFDI 101.3 KS Wichita, k\$, ID	941
0359 WDCL 89.7 KY Somerset, c\$, ID also for	475		3000
WKYU 88.9 and WKPB 89.5	475		
Conditions have been pretty good. Nice t	oreac	th 1000 heard plateau. Hope everyone is ha	ving a

STATION NEWS: WIDL 104.9 Care, Michi-

STATION NEWS: WIDL 104.9 Caro, Michiganhas switchedfrequencyto 92.1 (see Jeff Falconer's report. Also inhis report note that 94.5 in Port Clinton, Ohio [Toledo] Is now WXKR; format is "Toledo's Classic Rock." WLYF101.5 in Miamiis reportedly dropping easy listening format for soft vocals. CJLX 91.9 in Toronto is on, seems very weak. It was broadcasting alocal carrace.



	LACE - SO. PLAINFIELD, N.J 07080
Equipment - Two McIntosh MR-78 tuners feed	ing separate amps/tape decks, a pair of CM Stereo
Probe 9s, stacked, with rotor_	
	ime: ELT
JUNE 1990 1 Es	26 Es (continued)
1100 KTKC 92.7 LA Springhill,	2124 KPLX 99.5 TX Ft. Worth, K-Plex, k, over WBAI/WJBR 1365
	over WBAI/WJBR 1365 1177 2137 KLTY 94.1 TX Ft. Worth, SID 1365
	1208 2145 KLRE 90.5 AR Little Rock,
1127 WXRZ 94.3 MS Corinth, call + Z-94	
1954 WYNF 94.9 FL Tampa, ID, r	863 KLRE-KUAR ID, classical 1056 985 2300 KOSU 91.7 OK Stillwater, nx, call 1265
1959 WYFO 91.9 FL Lakeland, ID, g	965 27 Tr
2011 WTRS 102.3 FL Dunnellon	917 0100 Norfolk strong
13 Tr	0118 WXRI 107.7 VA Windsor, BRN
2140 WDJQ 92.5 OH Alliance, r,	(Business News), ID with Suffolk 289
call + Q-92FM, r	350 27 Es
2214 WOMP 100.5 OH Bellaire, "Womp-FM", r	336 0933 KEGS 101.7 KS Emporia, ID, ad, k 1170
WLTJ-92.9 and WSHH-99.7 Pittsburgh also in	0941 KNMO 97.7 MO Nevada, KNEM-KNMO ID 1084
15 Tr/Trs	0942 WYMG 100.5 IL Jacksonville, call,
1652 WCUL 103.1 VA Culpeper, C-103, k,	Morning Zoo 850
Orange, Culpeper ad	239 0945 KJFM 101.7 MO Louisiana, call 883
1700 WAFY 103.1 MD Middletown, ID	183 0950 (KCFM) 107.7 MO Lexington, ads,
1919 WZVU-107.1 NJ off for a few hours Leav	
WZFM NY, WWHB NY, and bits of WEZX PA	
scatter occasionally.	E-Z Country 787
17 Tr	0956 KRXL 94.5 MO Kirksville, ad, wx,
0700 Strong Tr to Washington-Baltimore-	call + X and X-94 1/2 956
Norfolk	
0738 WDIH 90.3 MD Salisbury, g, IDs as	
WDIH, Deliverance Is Here	1000 KJTY 88.1 KS Topeka, g, 164 KJTY-KJTH-91.1 ID 1132
2000-2400 Boston very strong including rare	
heard WJIB-96.9 and WZLX-100.7	1005 KBKB 101.7 IA Ft. Madison, ending
2159 (WWBB) 101.5 RI Providence, Legal ID,	
B-101 (strict), oldies, ex-WLKW	
2205 WMJX 106.7 MA Boston o/WLTW while null	
WLTW to the south (Boston is to the	1015 KEFM 96.1 NE Omaha, promo, ads,
north!!). Full WMJX ID	213 Light 96 1128
2229 (WBOQ)-104.9 MA Gloucester, classical	JULY 1 Es
W-Bach, ex-WVCA	239 1022 KNIN 92.9 TX Wichita Falls, ID 1402
19 Es	1026 KISR 93.7 AR Ft. Smith, "KISSER" 1146
1742 WEEJ 100.1 FL Port Charlotte, ID, r	1037 1027 KFNC 100.9 OK Sulphur, call, pgm of
1743 WTLN 95.3 FL Apopka, call, ad	915 Southern gospel music 1304
1759 WSEB 91.3 FL Englewood, ID, g	1045 1045 KKNG 92.5 OK Oklahoma City, call 1304
1914 (WNFB)94.3 FL Lake City, ads,	1058 KSPI 93.7 OK Stillwater, wx, area ads
call, ex-WQPD	but no ID on hour prior to news - QSLed
1924 WTNT 94.9 FL Tallahassee, TNT Country	reception as definite, however. 1265
+ call, k	892 1112 KCVO 91.7 MO Camdenton, g, call +
1931 WZLS 95.7 GA Valdosta	Christian Voice of the Ozarks 996
Valdosta's Z-97, r	836 3 Super Tr
1940 WAAC 92.9 GA Valdosta, C-93, k	836 2240 (WYSN)-101.7 PA Central City, Somerset
26 GW/Tr	- [1987] 25 H [1987] 25 TO 1 [1985] 전 전 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
From before 0400 to about 1430 WFUV-90.7 NY	
off leaving WTCC MA and WMRA VA plus	
tentatively WCLH PA and WOTJ NC and someone	2320 WTGV 97.7 MI Sandusky, call, ads,
(on Tr) with calls sounding like WVME	Tiger baseball 474
26 Es	2338 WWKI 100.5 IN Kokomo, k, call,
20 ES 1824 (WFLC)97.3 FL Miami, "So. FL's New Coa	"Best variety of country mx in IN" 615
	1078 Shine 99 636
1829 WHYI 100.7 FL Ft. Lauderdale, Y-100, New Kids promo	2347 WIOTt 104.7 OH Toledo, ad for Sylvania
	1051 which checks out perfectly on map
1900 WFTI 91.7 FL St.Petersburg, ID, g	1001 2359 WKPQ 105.3 NY Hornell, S/off which
	1078 consisted of a WHHO-WKPQ ID 207
	825 4 - even more Super Tr!
	1025 0010 WKXA 100.5 OH Findlay, call, r,
2012 WALX 100.9 AL Selma, PSA, call, r	898 "Findlay's Hit FM" 483
2026 WZGC 92.9 GA Atlanta,	0032 (WBMW) 107.7 NY Wethersfield, new age,
###   7 O7# -	723 "Buffalo's Wave", ex-WBIV/WUWU/WBYR 262
"Atlanta's Z-93", r	
2059 WURC 88.1 MS Holly Springs, ID	915 0052 CKGL 96.7 ON Kitchener, k, call 318
2059 WURC 88.1 MS Holly Springs, ID 2102 KQFX 96.7 TX Georgetown, "The Fox", o	915 0052 CKGL 96.7 ON Kitchener, k, call 318

ft.					
LT		122	13		
212/	V COI	ntinue	TV	Ft. Worth, K-Plex, k er WBAI/WJBR	
2124	KELA	77.3	IX	er WBAI/WJBR	1745
2137	KLTY	94 1	TX	Et Worth SIN	1365
2145	KIRF	90.5	AR	Ft. Worth, SID Little Rock,	1303
2173	Nan.	KI RF-	-KIII	AR ID, classical	1056
2300	KOSU	91.7	OK	Stillwater, nx, call	
27 T					1205
0100	Norfe	olk str	one	g	
0118	WXRI	107.7	VA	Windsor, BRN	
	(Bus	iness I	lew:	s), ID with Suffolk	289
27 E	S				
0933	KEGS	101.7	KS	Emporia, ID, ad, k	1170
0941	KNMO	97 7	MO	Nevada KNEM-KNMO TO	1084
0942	WYMG	100.5	IL	Jacksonville, call,	
				Morning 700	850
0945	KJFM	101.7	MO	Louisiana, call	883
0950	CKCF	43-107.3	5 M	O Lexington, ads,	
			C	all, k, ex-KBEK	1035
0952	WESZ	100.1	IL	Lincoln, call,	
	Utopo en el			E-Z Country	787
0956	KRXL	94.5	MO	Kirksville, ad, wx,	
			ca	Kirksville, ad, wx, ll + X and X-94 1/2	956
0959	KNIM	99.3	MO	Maryville, AM-FM ID	1075
1000	KJTY	88.1	KS	Maryville, AM-FM ID Topeka, g, KJTY-KJTH-91.1 ID	
				KJTY-KJTH-91.1 ID	1132
1004	88 1 1/1 1/1	100-0	40	HOL COLL HAP TO	789
1005	KBKB	101.7	IA	Ft. Madison, ending	
	22222	20 0		NBC News, ID, ads Red Oak, KOAK News Ottumwa, ID Omaha, promo, ads, Light 96	893
1010	KOAK	95.3	IA	Red Oak, KOAK News	1089
1014	KTWA	92.7	IA	Ottumwa, ID	953
1015	KEFM	96.1	NE	Omaha, promo, ads,	0000
1100.00				Light 96	1128
1022	LAITA	02.0	TV	Wichita Falls, ID Ft. Smith, "KISSER" Sulphur, call, pgm ogospel music Oklahoma City, call	4/03
1026	KILLD	07 7	AD	Wichita ratts, 10	1402
1020	KENC	100 0	OK	Sulphur call nom o	1140
IULI	KING	South	ON	goenel mueic	1304
1045	KKNG	92 5	OK	Oklahoma City call	1304
1058	KSPT	93.7	OK	Oklahoma City, call Stillwater, wx, area prior to news - QSL	ade
hut	DO.	D on h	OK	r prior to neve - 001	ads
rec	centio	on as	lef.	inite, however.	1265
1112	KCVO	91.7	MO	Camdenton, g, call +	
1.1.1.4	Chris	stian \	loi	ce of the Ozarks	996
3 St	mer 1	Tr -		200	
2240	<b>EWYSI</b>	17-101.	7 1	PA Central City, Some	rset
	ad.	Sunny 1	01	.7, ex-WWZE Erie, ID, classical Sandusky, call, ads,	233
2259	WOLN	91-3	PA	Erie. ID. classical	313
2320	WTGV	97.7	MI	Sandusky - call - ads -	- 10
ENTERIOR TO	-	15/08/5/04	- 1	Tiger baseball	474
2338	WWKI	100-5	IN	Kokomo, k. call.	0.5-61
	"Best	varie	ty	Kokomo, k, call, of country mx in IN"	615
2340	WSHW	99-7	IN	Frankfort, PSA	0.5
				Shine 99	636
2347	WIOTE	104-7	01	H Toledo, ad for Sylv	ania
	which	check	(5 (	out perfectly on map	
2359	WKPQ	105.3	NY	Hornell, S/off which	
and the same	and the second	consis	tec	d of a WHHO-WKPQ ID	207
4 -	even	more S	Sum	er Tri	
0010	WKXA	100-5	OH	Findlay, call, r.	
	-		"F	Findlay, call, r, indlay's Hit FM"	483
00.52	* WBMV	O 107.	.7 1	NY Wetherstield new :	age.
"Bu	iffalo	's Way	re"	, ex-WBIV/WUWU/WBYR Kitchener, k, call	262
0052	CKGL	96.7	ON	Kitchener, k, call	318
Will	cont	nue ne	ext	month	
					, Joe
					3

	RALE	H S	TROBEL - 106 E. DA	VIDSC	N STR	EET -	MUNCI	E,	INDIANA 47303	
Equipment	: McIr	tos	h MR-78 FM Tuner -	\$ter	eo Pr	obe 9	Anten	na	37 feet above gro	und
							1.72			
ay 1990 (	CDT)					(con			*	
7 MS				200					Jacksonville, wx	
525 WAYJ	88.7	FL	Fort Myers,	959				SD	Aberdeen, r\$	75
ICR/WOBO	off ai	r,	Previous Es		1735	KSDN			Aberdeen, r\$, ada	
0 tr					1736	KYYY			Bismarck, ads \$	89
500 CBBL	100.5	OM	London, //CBE 89.9	288	1801	KCCM	91.1	MN	Moorhead, c\$	73
(O/WWKI	100.5	IN	Kokomo, very low p	ower)	2315	KPQX	92.5	MT	Havre, k\$	130
			Erie, faint ID	307	2324	KYYA			Billings, r\$	122
2 MS		# m.	mile, andmi as		2328				Billings, r\$	122
	08 7	2017	Worth Diamen	026	2345				Billings, r\$	122
	90.7	N.T.	Fort Pierce	920		KGPR	Ro o	MITT	Gt. Falls, j mono	
3 MS							04.0	PLY.	Sheridan, r\$	113
612 WGIL	93.5	PL	Vero Beach,	912	2359		94.9	WI	Sheridan, re	11)
			Previous Es		28 Es					220
4 tr					0005	KZMQ			reybull, k\$	120
459 WIAA	88.7	MI	Interlochen, c\$	309	0017	KBOZ	93.7	MT	Bozeman, k\$	132
	E-88-3		(o/CIMX ON Windsor	)	0028	KYBS	97.5	MT	Livingston, k\$	130
			Magee-Jackson, wx,		29 E	3				
			nx, \$, "Magic-107"				93.9	TX	El Paso, r\$	131
TYRN OFT	105 1	ME	Kosciusko, k\$, ads	545						147
TEO WHEN	1000	A TO	Marshall, k\$	400	10))	241011	(M= m	·se	distant Es ever)	7
740 KONA	104.5	AR	naronall, se	# LC0	1700	TOWN				132
			Birmingham, AL wx	\$ 407	1100	W POLICE	90 8	MM	Dominion b*	107
902 WWZD	106.7	MS	New Albany, k\$	441	1101	K.BMW			Portales, b\$	
927 WEGR	102.7	TH	Memphis, ads \$	432	1113	KRIM			Show Low, r\$	142
939 WSLI	96.3	MS	Jackson, ads \$	607	1134	KGLX	99.1	NM	Gallup, k\$	138
958 WMC	99.7	TH	Memphis, ad	432	1136	KNLA	101.1	MM	White Rock, of,	119
(o/WSHW	99.7	IN	Frankfort)		ex	-KKBZ				
OOO WSTZ	106-7	MS	Vicksburg-Jackson	630	1137	KBOM	106.7	MH	Los Alamos, o\$	119
6 MS	10001		12000016						"K-Bomb"	
	09.7	D.C	Veshinston	h eth	1201	KMAK	04.0	ж	Astec, r\$	125
	90.7	DC	Washington	777					Roswell, ads \$	11
O MS			The state of the s							
150 KKCS	101.9	CO		1040			95+5	OK	Clinton, wx, \$	8.
72.7			Previous Es			WACO			Waco, TV-10 prom	0 0
241 KKCS	101.9	CO	CO Springs						San Angelo, SS	10
NAMA KOYT	101.9	TX	San Antonio,	1025	(ad	for R	verfr	ont	- calls in SS \$	)
		-	Previous Es	1.5					Leesburg-Orlando	
22 NS			11012080 80						found on tape)	
	100 7	mv	Houston	015		KELI			San Angelo, mj\$	10
	100.5	TA	Houston	227					Austin, r\$	9'
ty tr	recessors.					KEFI				11:
OOO WBLG	107.1	KI	Smiths Grove-	225		KWVS		TA	Kingsville, mj%	77.
-			Bowling Green, r			-KPUP				
25 Es						KMXR			Corpus Chr., r\$	10
956 WLVE	95.9	FL	Miami Beach, j\$	1040	2057	KQXT	101.9	TX	San Antonio, r\$	10
2000 WWFE			Okeechobee, g\$			KPVU	91.3	TX	Prairie View, \$	9
			Miami, ad, \$			KRTU			San Antonio, c\$	10
	300)		HIAMI, GG, 9	2010					Nuevo Laredo, \$	11
7 <u>Ka</u>	. 00 -	m 12	1343	067					Monterrey, SS \$	13
-O1 KGW2	00.1	. TA	Abilene, g\$			XXXL	710/	1420	womenralt ne &	
	93.3	TX	Killeen-Austin, r	9 723	20 1	- Dunna	07.0	mar	C Ch	10
458 KNC1	91.3	TX	Killeen-Cop. Cowe	933	2039	KMXR	95.9		Corpus Chr., ra	10
	89.5	TX	Tyler, g\$	773	2052	KPLV	93.3		Port Lavaca, r\$	10
			Texarkana, PSA \$						Corpus Chr., b\$	10
1506 KLTY			Fort Worth, ad \$	839	2104	KQUE	102.9	TX	Houston, m\$	9
1510 KTAR			Fredericksburg, \$	1020	31 E	3	7215552.5			
			Dallas, c\$	814	0917	KHOY	88.1	TY	Laredo, b\$	11
						KRRG			Laredo, r\$	11
TOTO KOX	101.	7 IA	San Antonio, r\$			n.n.n.d	70.1	- 44		-
1523 KMG0	102.9	TX	Dallas, r\$	814			00 -		"Energy-98"	2.2
1524 KRW	103.1	L AF	Waldron, ad for	594		KJBZ			Laredo, 18, SS	11
Powmore !	lank of	FGT	eenwood. Hartford.		1000	KBMI	89.9	TX	Laredo, SS \$	11
Hackett.	and Bo	nan	za, AR - TV 40/29	promo	1000	XMSA	B 89.5	NI	Sabinas Hidalgo	12
1527 KST	1 107	T TO X	Coleman, k\$	966	1001	XET	94.1	NI	Monterrey, SS \$	13
1535 KHA	04	o my	Arlington, ad \$	830	1850	KAAC	105-9	NE	Alliance, k\$, ad	18 9
LJJJ KRI	7 106	1 00	Tone Grove ed t						Cheyenne, r\$	10
			Lone Grove, ad \$							9
1539 KHK	103.	r ON	Atoka, ads, mono	\T(	1000	KCMI			Terrytown, b\$	
1540 KSJ	107.	5 TX	San Angelo, 1\$, S	2 TOS.	1900	KINE	91.1	. na	Alliance, c\$	9
(JC Penn	g ad in	n St	inset Mall - San Ang	elo)	1911	KPHY	102.1	. NE	Alliance, r\$	9
		7 17	( Abilene, r\$	963	1920	KTRS	95.5	WI	Casper, ra	10
1544 KOR	3 100".									
1544 KOR			Durant, ad\$	745	5 (0	/WTMS	95.5	IN	Indy)	

MORTHERN FM DX

and the second second				-					
31 Es (May)			100	1 E	(Ju	10)			
1033 KOOK 1	06 5 MY	Galveston, SS \$	015	1034	KMKC	107.3	mΥ	Post, k mono	1007
TODE WHOL T	OF O TA	Carleston, ss 4	266	1076	KOOK	106 5	mv	Colworken CC	
TASO KAOT I	OD.Y LA	Opelousas, rp\$ San Antonio, r\$ Dallas, r\$	700	1000	VAAV	100.0	TX	daraestou, se	915
1930 KTFM 1	02.7 TX	San Antonio, r\$	1050	1041	KLSC	104.7	TX	Lamesa, r\$	1010
1936 KOZY 1	05.3 TX	Dallas, r\$	814	1043	KTEZ	101.1	TX	Lubbock, mr\$	1017
1030 KMMY 1	06-7 TY	Terrill Hills, r\$	1045	11045	KENY	04.5	mY.	Tuchhoek ws	1017
10k3 VDTM 1	OG 7 MY	Domin be	770	1046	WIAN	02.7	my	Slaton, g\$	1017
1941 APLT I	U/o/ TA	Paris, k\$ Austin, rp\$ McCallister, k\$	719	1040	TO ME	7501	TV	Pracon' Ra	TOTI
1947 KPEZ 1	02.3 TX	Austin, rps	976	1050	KCTA	99.1	MM	CTOAIS, E MODO	1029
1948 KMCO 1	01.3 OK	McCallister, k\$	674	1053	KTZA	92.9	MM	Artesia, r\$	1185
(o/WYMG 1	01 - 3 TH	Richmond)	100000000000000000000000000000000000000	1057	KWMW	105.1	MM	Maljamar, k\$	1170
10E1 KODO 1	00 7 TV	Austin, rp\$ McCallister, k\$ Richmond) Abilene, ads \$	067	1105	VOLT	05 %	ж	Pontoles we	1071
TADT WORK I	00.7 IA	Wollene, ads &	301	1107	KOLL	77.07	INPL	LOTEUTAR' 14	TOLT
		San Antonio, k\$	1050	1245	KLSF	96.9	TX	Amarillo, ad \$	965
1957 KTXK	91.5 TX	Texarkana, PSA\$	690	1254	KHFM	96.3	MM	Albuquerque, c\$	1216
		Mesquite. PSAS	808	1300	KFLQ	91.5	NM	Albuquerque, g\$	1216
BOOT KDAO	80 0 TA	Mesquite, PSAS Shreveport, \$	206	1634	MALU	07.0	CO	CO Cominge me	1040
SOOT KDAG	09.9 DA	sureasbore, a	700	1024	KALLO	77.7	00	co springs, 19	1010
								Miami Beach, j\$	
2009 KKER	98.1 TX	Anson-Abilene, r\$	961	2352	KMXR	93.9	TX	Corpus Chr., r\$	1098
			1050						
						06 7	TA	Daniel - be	751
(o/WAJC 1		Indy)		1020	N.L.B.O	90.5	LIA	Brusly, b\$	121
		Hamlin, k\$	966	1053	KTOL	101.1	TX	Mouston, r\$	915
2017 KGEE	99.9 TX	Monahans, ad \$	1127	1037	KOKI	95.3	LA	Bayou Vista, k\$	795
2030 KCRS 1	03.3 PY	Monahans, ad \$ Midland, wx, \$	1090	1040	KDRE	97.7	LA	Natchitoches ad	\$ 723
			2070	1042	VIME	07 0	mv	Woundan	OTE
(o/WMJC 1	NI COCO	Indy)	0	1045	ALTR	7201	IA	Houston, mr\$	915
2031 KQTZ 1	.05.9 OK	Hobart, rp\$	631	1049	KWVS	97.5	TX	Kingsville, mj\$	1118
2033 KXXK 1	05.5 OK	Chickasha, ads \$	775	1051	KLSU	91.1	LA	Baton Rogue, r\$	751
		Andrews	1110	1053	KOYE	Uls O	my		1192
		Wasses #				03.0	4.4	Communa Change	
			1120					Corpus Chr., g\$	
2042 KTEZ 1	01.1 TX	Lubbock, mr\$	1017	1101	KRTU	91.7	TX	San Antonio, c\$	1050
		Tulsa, r\$			KSBJ			Humble, g\$ ex-88.	
2049 PUROS	OF E OK	Pib Other and P	870	7775	VYDE	04 5	my	Wanatan ad &	07.5
SOME RECO	90.5 OK	Elk City, wx, \$	050	TTTD	WFDW	94.7	TA	nouston, ad a	917
2050 KATT 1	.00.5 OK	OK City, "The Cat Kokomo!) Hobbs, r\$ Stillwater, wx \$	738	1119	KMTE	98.7	MM	Maljamar, ca	1170
(o/WWKI 1	00-5 IN	Kokomol)		1122	KWMW	105.1	MM	Maljamar. k\$	1170
BOEL MADE	04 3 104	Webbe mg	1140	7725	KMAK	04 0	MM	Anton mt	1250
ZUJO KZUK	AA.T NW	Modes, re	1140	1127	WMTV	77.7	MPI	ALEEC, IA	16,70
2058 KOSU	91.7 OK	Stillwater, wx 8	694	1125	KMXR	93.9	TX	Corpus Chr., ra	1098
2100 KENT	90.5 TX	Odessa, g\$	1110	1129	KSCS	96.3	TX	Fort Worth, kS	839
23.00 Kilin	90 5 PY	Angkin	978	1130	KTYV	05 3	WY	Brody	980
ELOO KOI	90. J IX	MUSELII	7770	1170	TO ALL Y	99.3	m>r	21003	800
STOO KOGA	91.5 TX	Odessa, g\$ Austin Odessa Edmond-OKC, r\$ Lubbock, k\$	TITO	1122	KRTU	90.1	TX	Denton, ca	909
2104 KOKF	90.9 OK	Edmond-OKC, r\$	730	1135	KSPZ	92.9	CO	CO Springs, r\$	1040
2105 KITK	93.7 TX	Lubbock, ks	1017	7747	KKXK	94.7	CO	Montrose, ad \$	1200
STIO VMYD	OO F OK	Prokon Annow of	6zh	2748	WDAT	07 7	CO	Consta me	1150
CITO WILD	90. J OK	Broken Arrow, g\$ Farmington, k\$	7000	1140	WWW	77.1		orarg, 14	250
2116 KRAZ	96.9 NM	Farmington, Et	1260	1202	KSEC	95.5	CO	Lamar, mra	960
2121 KKJQ	97.3 KS	Garden City, ads	\$ 845	1214	KMOR	92.9	ME	Scottsbluff, mr\$	968
2121 KKSS	97.3 NM	Sante Fe, r\$	1185	1223	KKMK	93.9	SD	Ranid City, r\$	953
DIDE MATA I	03 5 88	T/2	966	h 24		1201		mapes sary, iv	"
STS KAPA T	OI. > Na	Liberal, ad\$	000	4 M	5	00 -	9230		
2124 KKCS 1	.01.9 CO	CO Springs, k\$	1040	0222	KRVS	88.7	LA	Lafajette,	782
2126 KVGB 1	04-3 KS	Great Bend, ads \$	726	1	Pr	evious	Es	on ex-88.1	
								Indy, off air M	(ma
June 1990						0001	TI	Indii oir air n	DLIM /
1 Es				5 t					
0924 KGNZ	88.1 TX	Abilene, g\$	961	0950	WKZL	107.5	NC	Winston-Salem, r	\$ 396
	00 5 FY	Odessa, g\$	1110	11110	WORD	Oh m	men	Cookeville, k\$	290
OGSI KEMP							3.14		
0931 KENT	00 5 E	San Angelo co e	1025	1-	MARK	94.7	TH	Tudel	
Oggo Kadr I	LUY OF TA	san wudero, ss s	1025	(0	/WIBQ	94.7	IN	Indy)	
0943 KELI	98.7 TX	San Angelo, mj\$	1025	1825	/WFBQ WVRI	94.7	IN	Indy) Waverly, o\$, ads	310
0943 KELI	98.7 TX	San Angelo, mj\$	1025	1825	/WFBQ WVRI	94.7	IN	Indy) Waverly, o\$, ads	310
0956 KELI 0950 KCHX 1	98.7 TX	San Angelo, mj\$ Midland, r\$, ads	1025 1025 1090	1825 1830	WFBQ WVRI WENN	94.7 105.1 107.7	IN TN AL	Indy) Waverly, o\$, ads Birmingham, s\$	310 467
0950 KCMX 1 0952 KMXS 1	98.7 TX 106.7 TX	San Angelo, mj\$ Midland, r\$, ads Abilene, k\$,	1025 1025 1090 961	1825 1830 1843	WYRY WENN WAHR	94.7 105.1 107.7 99.1	IN TN AL AL	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$	310 467 382
0958 KSJT 1 0958 KELI 0950 KCMX 1 0952 KHXS 1 (PSA mentio	98.7 TX 106.7 TX 106.3 TX	San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106	1025 1025 1090 961	1825 1830 1843 1850	WFBQ WENN WENN WARR WWKZ	94.7 105.1 107.7 99.1 103.5	IN TN AL AL MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$	310 467 382 441
0958 KSJT 1 0958 KELI 0950 KCMX 1 0952 KHXS 1 (PSA mentio	98.7 TX 106.7 TX 106.3 TX	San Angelo, mj\$ Midland, r\$, ads Abilene, k\$,	1025 1025 1090 961	1825 1830 1843 1850	WFBQ WENN WENN WARR WWKZ	94.7 105.1 107.7 99.1 103.5	IN TN AL AL MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$	310 467 382 441 381
0958 KSJT 1 0950 KCMX 1 0952 KMXS 1 (PSA mentio 0954 KWKQ 1	98.7 TX 106.7 TX 106.3 TX 108.3 ACU	San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$	1025 1025 1090 961	1825 1830 1843 1850 1909	WYRY WENN WAHR WWKZ WZYP	94.7 105.1 107.7 99.1 103.5 104.3	IN TN AL AL MS AL	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$	310 467 382 441 381
0956 KSJT 1 0950 KCMX 1 0952 KMXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1	98.7 TX 106.7 TX 106.3 TX 106.3 TX 107.1 TX	San Angelo, mj\$ Midlend, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox"	1025 1025 1090 961 " 885 981	1825 1830 1843 1850 1909	WFBQ WWRI WENN WAHR WWKZ WZYP WZYP	94.7 105.1 107.7 99.1 103.5 104.3 98.5	IN TN AL AL MS AL MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$	310 467 382 441 381 448
0945 KELI 0950 KCEX 1 0952 KHXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1	98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX	San Angelo, as \$ San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Morkel, r\$, "Fox" Harker Heights	1025 1025 1090 961 885 981 933	(o. 1825 1830 1843 1850 1909 1919	WFBQ WWRI WENN WAHR WWKZ WZIP WZIQ WWMS	94.7 105.1 107.7 99.1 103.5 104.3 98.5	IN TN AL MS AL MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$	310 467 382 441 381 448
0943 KELI 0950 KCEX 1 0952 KHXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1 0957 KIXS 1	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX	San Angelo, as \$ San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Karker Heights Abilene, k\$	1025 1025 1090 961 885 981 933 961	(o) 1825 1830 1843 1850 1909 1919	WFBQ WVRY WENN WAHR WWKZ WZYP WZIQ WWMS	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5	IN AL AL MS AL MS KI	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Owford, k\$ Louisville)	310 467 382 441 381 448 462
0943 KELI 0950 KCEX 1 0952 KHXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1 0957 KIXS 1	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX	San Angelo, as \$ San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Karker Heights Abilene, k\$	1025 1025 1090 961 885 981 933 961 966	(o) 1825 1830 1843 1850 1909 1919 1935 (o)	WFBQ WVRY WENN WAHR WWKZ WZIP WZIQ WWMS WAMZ WWZD	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7	IN AL AL MS AL MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$	310 467 382 441 381 448 462
0945 KELI 0950 KCEX 1 0952 KHXS 1 (PSA mentio 0954 KWKQ 1 0955 KPQX 1 0957 KIXS 1 0959 KEAN 1	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX 105.1 TX 101.5 TX	san Angelo, as \$ san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownood, k\$	1025 1025 1090 961 885 981 933 961 966	(o) 1825 1830 1843 1850 1909 1919 1935 (o)	WFBQ WVRY WENN WAHR WWKZ WZIP WZIQ WWMS WAMZ WWZD	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7	IN AL AL MS AL MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$	310 467 382 441 381 448 462
0955 KELI 0950 KCEX 1 0952 KHXS 1 (PSA mentio 0955 KFQX 1 0955 KFQX 1 0957 KIXS 1 0959 KEAN 1 1005 KOXE 1	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX 105.5 TX 105.5 TX 105.5 TX	San Angelo, as \$ San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$	1025 1025 1090 961 885 981 933 961 966 928	(o, 1825 1830 1843 1850 1909 1919 1935 (o, 2000 2022	WFBQ WENN WAER WWKZ WZYP WZLQ WWMS WAMZ WWZD WERZ	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7	IN AL AL MS AL MS KY MS KY	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$	310 467 382 441 381 448 462 441 245
0945 KELI 0950 KCEK 1 0952 KEKS 1 (PSA mentio 0955 KFQX 1 0957 KIXS 1 0957 KIXS 1 0959 KEAN 1 1005 KOKE 1 1007 KEKT	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX 105.5 TX 101.5 TX 101.5 TX	San Angelo, as \$ San Angelo, mj\$ Widland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Morkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "G-101	1025 1025 1090 961 " 885 981 933 961 966 928	(o, 1825) 1830 1843 1850 1909 1919 2000 2022 2112	WFBQ WENN WAHR WZYP WZYP WZYP WWMS WAMZ WWZD WERZ WFTA	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7	IN AL AL MS AL MS KY MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$	310 467 382 441 381 448 462 441 245 447
0945 KELI 0950 KCEK 1 0952 KEXS 1 (PSA mentio 0954 KWKS 1 0957 KIXS 1 0957 KIXS 1 0959 KEAN 1 1005 KOXE 1 1007 KEXT	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX 105.5 TX 101.5 TX 101.5 TX	San Angelo, as \$ San Angelo, mj\$ Midland, r\$, ads Abilene, k\$, campus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$	1025 1025 1090 961 " 885 981 933 961 966 928	(o, 1825) 1830 1843 1850 1909 1919 2000 2022 2112	WFBQ WENN WAHR WZYP WZYP WZYP WWMS WAMZ WWZD WERZ WFTA	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7	IN AL AL MS AL MS KY MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$	310 467 382 441 381 448 462 441 245
0958 KSEI 1 0950 KCEX 1 0952 KMKS 1 (PSA Bentio 0954 KWKQ 1 0955 KFQX 1 0957 KIXS 1 0959 KEAN 1 1005 KOXE 1 1007 KEXT 1 1013 KKCW 1 (Ad for CC	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.1 TX 105.5 TX 101.5 TX 101.3 TX 101.3 TX	san Angelo, as \$ san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "C-101 Go. of Corpus Chr	1025 1025 1090 961 " 885 981 933 961 966 928	(o, 1825) 1830 1843 1850 1909 1919 2000 2022 2112 2130	WFBQ WVRY WENN WAHR WXLQ WZYP WZLQ WWMS WAMZ WWZD WWRZ WFFA	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9	IN AL AL MS AL MS KY MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$	310 467 382 441 381 448 462 441 245 447
0958 KSEL 1 0950 KCHX 1 0952 KMXS 1 (PSA mentio 0955 KFQX 1 0955 KFQX 1 0957 KXXS 1 1005 KOXE 1 1007 KEXT 1015 KNGW 1 (Ad for Cc (o/WFMG 1	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX 102.7 TX 105.5 TX 101.5 TX 101.3 TX 101.3 TX 101.3 TX	san Angelo, as \$ san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "G-101 Co. of Corpus Chr Richmond)	1025 1025 1090 961 " 885 981 933 961 966 928 " 941 1sti)	(o, 1825) 1830 1843 1850 1909 1919 1935 (o, 2000) 2022 2112 2130 (o, 2000) 1900 1900 1900 1900 1900 1900 1900	WFBQ WENN WAHR WAHR WZYP WZLQ WWMS WAMZ WEZQ WFTA WECO WFMG	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9	IN AL AL MS AL MS KY MS KY MS	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$	310 467 382 441 381 448 462 441 245 447
0950 KSET 1 0950 KCEX 1 0950 KCEX 1 0952 KMXS 1 (PSA mentio 0955 KFQX 1 0957 KXXS 1 0957 KXXS 1 1005 KOXE 1 1007 KEXT 1013 KNCW 1 104 for CC (o/WFMG 1 1014 KOOI 1	98-7 TX 106-7 TX 106-3 TX 107-1 TX	San Angelo, as \$ San Angelo, mj\$ Widland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Werkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "G-101 Co. of Corpus Chr Richmond) Jacksonville, wx	1025 1025 1090 961 885 981 933 961 966 928 941 1sti)	(o, 1825) 1830 1843 1850 1909 1919 1935 (o, 2000) 2022 2112 2130 (o, 6 t)	WFBQ WVRY WEMN WAHR WWKZ WZYP WZLQ WWMS WWZD WWRZ WFTA WECO WFMG	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3	IN AL AL MS AL MS KY MS KY MS KY IN	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond)	310 467 382 441 381 448 462 441 245 447 300
0950 KSET 1 0950 KCEX 1 0950 KCEX 1 0952 KMXS 1 (PSA mentio 0955 KFQX 1 0957 KXXS 1 0957 KXXS 1 1005 KOXE 1 1007 KEXT 1013 KNCW 1 104 for CC (o/WFMG 1 1014 KOOI 1	98-7 TX 106-7 TX 106-3 TX 107-1 TX	san Angelo, as \$ san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "G-101 Co. of Corpus Chr Richmond)	1025 1025 1090 961 885 981 933 961 966 928 941 1sti)	(o, 1825) 1830 1843 1850 1909 1919 1935 (o, 2000) 2022 2112 2130 (o, 6 t)	WFBQ WENN WAHR WAHR WZYP WZLQ WWMS WAMZ WEZQ WFTA WECO WFMG	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3	IN AL AL MS AL MS KY MS KY MS KY IN	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$	310 467 382 441 381 448 462 441 245 447 300
0958 KSELI 0950 KCHX 1 0952 KMXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1 0957 KIXS 1 0959 KEAN 1 1005 KOXE 1 1007 KEXE 1 1014 KOOI 1 1023 KTDR	98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.1 TX 105.5 TX 101.5 TX 101.3 TX 101.3 TX 101.3 TX 101.3 TX	san Angelo, as s san Angelo, as s Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonville, wx Del Rio, r\$	1025 1025 1090 961 "885 981 933 966 928 "941 1sti)	(o 1825 1830 1843 1850 1909 1919 (o 2000 2022 2112 2130 (o 6 t 0134	WFBQ WVRI WENN WAHR WWKZ WZYP WZUM WWMS WWZD WWRZ WFTA WECO WFMG F	94.7 105.1 107.7 99.1 103.5 104.5 97.5 97.5 106.7 97.7 101.9 101.3	IN TN AL MS AL MS KY MS KY MS KY MS TN	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Owford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$	310 467 382 441 381 448 462 441 245 447 300
0945 KSTI 0950 KCHX 1 0952 KHXS 1 (PSA Hentic 0955 KFQX 1 0955 KFQX 1 0957 KIXS 1 1005 KOXE 1 1007 KEXT 1015 KOXE 1 1014 KOOI 1 1025 KETI	98.7 TX 98.7 TX 106.7 TX 106.3 TX 107.1 TX	san Angelo, as \$ san Angelo, as \$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "G-101 Go. of Corpus Chr Richmond) Jacksonville, wx Del Rio, r\$ Austin, r\$	1025 1025 1090 961 885 981 933 961 966 928 941 1sti) 792 1110	(o) 1825 1830 1843 1850 1909 1919 (o) 2002 2012 2112 2130 (o) 6 t	WFBQ WVRI WENN WAHR WWKZ WZYP WZLQ WWMS WWZD WWZD WFTA WECO WFMG F WKWX (WWWO	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3 101.3	IN TN AL MS AL MS KY MS KY MS TN IN	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ Martford City, o	310 467 382 441 381 448 462 441 245 447 300
0945 KSTI 1 0950 KCHX 1 0952 KHXS 1 (PSA mentio 0955 KFQX 1 0955 KFQX 1 0957 KIXS 1 0959 KEAN 1 1007 KEXT 1 1007 KEXT 1 1007 KEXT 1 1014 KOOI 1 1023 KTDR 1 1028 KOYE 1	0.07.5 TA 98.7 TX 0.06.7 TX 0.06.3 TX 0.07.1 TX 0.05.1 TX 0.05.1 TX 0.05.1 TX 0.01.5 TX 98.5 TX 0.01.3 TX 98.5 TX 0.01.3 TX 98.3 TX 98.9 TX 94.9 TX	san Angelo, as \$ san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Erownwood, k\$ Rockdale, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonwille, wx Del Rio, r\$ Austin, r\$ Laredo, r\$	1025 1025 1090 961 885 981 933 961 928 941 1sti) 792 1110 978 1192	(o) 1825 1830 1843 1850 1909 1919 1935 (o) 2002 2112 2130 (o) 6 to 0134	WFBQ WVRI WENN WAER WVX1P WZ1Q WWMS WWZD WWRZ WFFA WECO F WKWX (WWWO WIST	94.7 105.1 107.7 99.1 103.5 98.5 97.5 97.5 106.7 97.7 101.9 101.3 101.3	TN AL AL MS AL MS KY MS KY TN TN TN	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ martford City, o Lobelville, k\$	310 467 382 441 381 448 462 441 245 447 300 375 ff) 320
0958 KSELI 0950 KCHX 1 0952 KMXS 1 (PSA mentio 0954 KWKQ 1 0955 KFQX 1 0957 KIXS 1 0957 KIXS 1 1005 KOXE 1 1007 KKXE 1 1007 KKXE 1 1007 KKXE 1 1014 KOOI 1 1023 KTDR 1025 KOYE 1 1028 KOYE 1 1028 KOYE 1 1028 KOYE 1	07:07:07 TA 98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.	san Angelo, as s san Angelo, as s Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Brownwood, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonwille, wx Del Rio, r\$ Austin, r\$ Laredo, r\$ Fort Worth, k\$	1025 1025 1090 961 885 981 933 961 928 941 1sti) 792 1110 978 1192 839	(o 1825 1830 1843 1850 1909 1919 1935 (o 2000 2022 2112 2130 (o 6 t 0134	WFBQ WVRY WENN WAHR WWKZ WZYP WZLQ WWMS WWFFA WECO WFFG WKWX (WWWO WIST	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3 93.5 93.5 93.5 93.5 93.5	IN IN IN AL AS AS AS AS KY MS KY IN IN IN TM VA	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ Martford City, o Lobelville, k\$ Big Stone Gap, k\$	310 467 382 441 381 448 462 441 245 447 300 375 ff) 320
0958 KSEI 1 0958 KEEI 1 0959 KEEN 1 1005 KOXE 1 1007 KEXE 1 1007 KEEI 1 1014 KOOI 1 1023 KTDR 1 1028 KOYE 1 1031 KSCS	07:07:07 TA 98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.	san Angelo, as s san Angelo, as s Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Harker Heights Abilene, k\$ Brownwood, k\$ Brownwood, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonwille, wx Del Rio, r\$ Austin, r\$ Laredo, r\$ Fort Worth, k\$	1025 1025 1090 961 885 981 933 961 928 941 1sti) 792 1110 978 1192 839	(o 1825 1830 1843 1850 1909 1919 1935 (o 2000 2022 2112 2130 (o 6 t 0134	WFBQ WVRY WENN WAHR WWKZ WZYP WZLQ WWMS WWFFA WECO WFFG WKWX (WWWO WIST	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3 93.5 93.5 93.5 93.5 93.5	IN IN IN AL AS AS AS AS KY MS KY IN IN IN TM VA	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ Martford City, o Lobelville, k\$ Big Stone Gap, k\$	310 467 382 441 381 448 462 441 245 447 300 375 ff) 320
0945 KSLI 0950 KCHX 1 0950 KCHX 1 0952 KMXS 1 0958 KWKQ 1 0955 KFQX 1 0957 KIXS 1 0957 KIXS 1 1005 KOXE 1 1007 KEXT 1 1007 KEXT 1 1014 KOOI 1 1024 KTDR 1 1028 KOYE 1 1031 KSCS	07:07:07 TA 98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.	san Angelo, as s san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonville, wx Del Rio, r\$ Austin, r\$ Laredo, r\$ Fort Worth, k\$ Eastland, k\$, ads	1025 1025 1090 961 885 981 966 928 941 1sti) 792 1110 978 1192 839 931	(o) 1825 1830 1843 1850 1909 1919 1935 (o) 2002 2112 2130 (o) 6 to 0134 0242 0406 (New	WFBQ WVRI WEMN WAHR WAHR WZIP WZIQ WWMS WWZD WWZD WFTA WECO WFMG WWWO WIST	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3 93.5 93.5 93.5 93.5 93.5	IN IN IN AL AS AS AS AS KY MS KY IN IN IN TM VA	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ Martford City, o Lobelville, k\$ Big Stone Gap, k\$	310 467 382 441 381 448 462 441 245 447 300 375 ff)
0945 KSFI 1 0950 KCHX 1 0950 KCHX 1 0952 KMXS 1 (PSA mentio 0954 KWKQ 1 0957 KIXS 1 0957 KIXS 1 0959 KEAN 1 1005 KOXE 1 1007 KOXE 1 1007 KOXE 1 1007 KOXE 1 1014 KOOI 1 1023 KTDR 1025 KOFI 1 1028 KOYE 1 1028 KOYE 1 1028 KOYE 1	07:07:07 TA 98.7 TX 106.7 TX 106.3 TX 107.1 TX 107.	san Angelo, as s san Angelo, mj\$ Midland, r\$, ads Abilene, k\$, eampus), "Kix-106 Graham, k\$ Merkel, r\$, "Fox" Marker Heights Abilene, k\$ Brownwood, k\$ Rockdale, k\$ Sinton, p\$ "C-101 Co. of Corpus Chr Richmond) Jacksonville, wx Del Rio, r\$ Austin, r\$ Laredo, r\$ Fort Worth, k\$ Eastland, k\$, ads	1025 1025 1090 961 885 981 933 961 928 941 1sti) 792 1110 978 1192 839	(o) 1825 1830 1843 1850 1909 1919 1935 (o) 2002 2112 2130 (o) 6 to 0134 0242 0406 (New	WFBQ WVRI WEMN WAHR WAHR WZIP WZIQ WWMS WWZD WWZD WFTA WECO WFMG WWWO WIST	94.7 105.1 107.7 99.1 103.5 104.3 98.5 97.5 106.7 97.7 101.9 101.3 93.5 93.5 93.5 93.5 93.5	IN IN IN AL AS AS AS AS KY MS KY IN IN IN TM VA	Indy) Waverly, o\$, ads Birmingham, s\$ Huntsville, m\$ New Albany, r\$ Athens, r\$ Tupelo, r\$ Oxford, k\$ Louisville) New Albany, k\$ Providence, k\$ Fulton, r\$ Wartburg, k\$ Richmond) Savannah, r\$ Martford City, o Lobelville, k\$ Big Stone Gap, k\$	310 467 382 441 381 448 462 441 245 447 300 375 ff)

6 Es (June) 0855 KILO 93.9 CO CO Springs, 1 0904 KSEC 93.3 CO Lamar, nx, \$ 7 tr							
0855 KILO 93.9 CO CO Springs, 1 0904 KSEC 93.3 CO Lamar, nx, \$		27 Es	(Jun	a)			
0904 KSEC 93.3 CO Lamar, nx, \$	-# 1040	0959		91.5	CO	CO Springs, NPR\$	1040
				80.7	CO	CO Springs, g\$	1040
7 % 2	900	1002	KWRT	91.1	CO	Morrison-Denver,\$	
	300					Lamar, wx \$	960
0702 WRKU 95.1 PA Grove City,	rpa 290					Denver, mr\$	1040
(o/WAJI 95.1 IN Fort Wayne)				101.1	N D	Mastings, r mono	
8 tr		1020					1055
2259 WKBM 100.7 IL Coal City, m	165	1024				Greeley, r\$	
9 tr	51 1942	1025				Mesquite, r\$	808
1042 WGKL 101.7 IL Greenville,	ad 240					Brownwood, k\$	966
(WEWZ 101.7 IN Elwood, off		1032	KAAQ				918
11 tr		1039	KTRS	95.5	WY	Casper, r\$	1095
2020 WISH 107.1 GA Rockmart, 50	kw 420	(0/	WIMS			Indy)	
		1041					1250
12 tr 2100 WMTR 96.1 ON Archbold, ex	_WWFD 125	1056					1095
		1057				Powell, r\$	1240
(o/WQLK 96.1 IN Richmond)	95.9					Lubbock, r\$	1017
14 Es		1124					965
1520 KJYE 92.3 CO Grand Juneti		1127	KSLF			Amarillo, r\$	
(o/WTTS 92.3 IN Bloomington-	Indy)	1129		88.3	K\$	Wichita, g\$	665
1534 KCMI 96.9 NE Terrytown, c		1145	KQSW	96.5	MA	Rock Springs, ad	1255
1536 KKMX 95.9 CO Hayden, r\$						Rapid City, r\$	953
1539 KSID 98.7 NE Sidney, ads		1153				Riverton, r\$	1195
		1159				Greeley, j\$	1055
1540 KQSW 96.5 WY Rock Springs	3350	1204	Kuba	07.1		Riverson, nx S	1195
1546 KRAI 93.7 CO Craig, r\$	1150	1204	LERGE D	77.1	-	1	//
1550 KNEB 94.1 NE Scottsbluff,	k\$ 968	(0)	WKLR	97.1	TIL	Indy)	1100
1611 KCWC 88.1 WY Riverton, rs	1195	1221	KNCM	92.5	MT	Miles City, Fa	1100
1625 KTAK 93.9 WY Riverton, r\$	1195	1243	KEAY	88.5	ND	Belcourt, PSA b	950
1550 KNEB 94.1 NE Scottsbluff, 1611 KCWC 88.1 WY Riverton, r\$ 1625 KTAK 93.9 WY Riverton, r\$ 1641 KTRZ 95.1 WY Riverton, m\$ (o/WKLR 93.1 IN Indy)	1195	28 Es	1				
(o/WKLR 93.1 IN Indy)		1644	KSNM	98.7	NM	Truth or Con., \$	1300
16 40		1647	KHEY	96.3	TX	El Paso, k\$	1315
16 tr	nda 225					El Paso, r\$	1315
1433 WKMK 99.1 KY Edmonton, k,	aus ac,						1315
(o/WHKO 99.1 OH Dayton)		11/00	AUNA	72.07	LA	El Paso, r\$ Bloomington-Indy	1
19 MS							
0143 WCIE 91.1 FL Lakeland	861	1702				El Paso, "Z-93"	1315
20 Es		(0)	WKLR	93.1	IM	Indy)	
TO12 KGNZ 88.1 TX Amarillo, gs	965	1710	KPRR	102.1	TX	El Paso, r\$	1315
25 Es		1711	KTEZ	101.1	TX	Lubbock, r\$	1017
	w\$ 100f					Lamesa, o\$	1010
1745 KMXR 93.9 TX Corpus Chr.,						Odessa, g\$	1110
1900 KEZE 93.9 TX El Paso, r\$	0 1337	17727	WINT IN	206 2	my	Wichite Fells F	
1912 KTDR 96.3 TX Del Rio, SS		TYYT	VETE	100.7	TA	Wichita Falls, r	-1010
1957 KILO 93.9 CO CO Springs,	r\$ 1040	1724	KAUM	106.5	TX	Colorado City, w	KTOTO
	7793	11737					
1959 KNOY 88.1 TX Laredo, b\$						Ft. Stockton, ad	\$1185
1959 KNOY 88.1 TX Laredo, b\$						Maljamar, k\$	1170
1959 KMOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, SS \$	1192	2 1743	KMMM	105.1	MM	Maljamar, k\$	\$1185 1170 961
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, SS \$ 2015 KTSC 89.5 CO Pueblo, r\$	1192	1743	KWMW	105.1	NM TX	Maljamar, k\$ Abilene, k\$	1170
1959 KHOY 88.1 TX Laredo, b\$ 1959 KHMI 89.9 TX Laredo, SS 1 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEFC 90.5 CO CO Springs,	1192 1033 r\$ 1046	2 1743 7 1745 0 1800	KWMW KNXS KNYM	105.1 106.3 92.3	NM TX TX	Maljamar, k\$ Abilene, k\$ Midland, k\$	961 1090
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, s\$ \$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 GO CO Springs	1192 1037 r\$ 1040 p\$ 1040	1743 7 1745 0 1800 0 (o,	KWNW KHXS KNIM WTTS	105.1 106.3 92.3 92.3	nn TX TX In	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy	1170 961 1090
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, s\$ \$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKTM 96.5 CO CO Springa,	1193 1037 r\$ 1046 p\$ 1046 r\$ 1046	2 1743 7 1745 0 1800 0 (0,	KWMW KMXS KMFM WTTS KBLP	105.1 106.3 92.3 92.3 105.1	MM TX TX IN OK	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$	1170 961 1090 )
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO GO Springs, 2042 KRCC 91.5 GO GO Springs, 2044 KKFM 96.5 CO GO Springs, 2050 KHYT 107.9 GO Pueblo, r\$	1192 1037 r\$ 1040 p\$ 1040 #\$ 1040	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802	KWMW KMXS KMFM WTTS KBLP KACT	105.1 106.3 92.3 92.3 105.1 105.5	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$	1170 961 1090 ) 760 1110
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKIM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs	1193 1037 r\$ 1046 p\$ 1046 r\$ 1046 1037 k\$ 1046	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807	KWMW KHXS KNFM /WTTS KBLP KACT KZOR	105.1 106.3 92.3 92.3 105.1 105.5 94.1	TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Hobbs, ad\$	1170 961 1090 760 1110
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2100 KWIK 94.9 NM Astec, r\$	1197 1037 r\$ 1046 p\$ 1046 #\$ 1046 1037 k\$ 1046	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815	KWMW KMXS KMIM WTTS KBLP KACT KZOR KALP	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7	NN TX TX IN OK TX NM	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$	1170 961 1090 760 1110 1250
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKIM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs	119; 103; r\$ 104; p\$ 104; w\$ 104; 103; k\$ 104; 125; k\$ 126;	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815 0 1816	KWMW KMXS KMIM WTTS KBLP KACT KZOR KALP KGNZ	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1	TX TX IN OK TX AM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobbs, ad\$ Alpine, k\$ Abilene, g\$	1170 961 1090 760 1110 1250 961
1959 KMOX 88.1 TX Laredo, \$\$ 1959 KBNL 89.9 TX Laredo, \$\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KKCM 91.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2100 KWYK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington,	1192 1037 r\$ 1044 p\$ 1044 103 k\$ 1044 1257 k\$ 1266	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815 0 1816	KWMW KHXS KNFM WTTS KBLP KACT KZOR KALP KGNZ	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1	NN TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$	1170 961 1090 760 1110 1250
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KKCS 101.9 CO CO Springs, 2100 KWYK 94.9 NM Astec. r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTBA 102.1 NM Farmington,	1192 1037 r\$ 1044 p\$ 1044 103 k\$ 1044 1257 k\$ 1266	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815 0 1816	KWMW KHXS KNFM WTTS KBLP KACT KZOR KALP KGNZ	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1	NN TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$	1170 961 1090 760 1110 1250 961
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKFM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KKCS 101.9 CO CO Springs, 2100 KWYK 94.9 NM Astec. r\$ 2105 KRAZ 96.9 NM Farmington, 2115 KCEM 104.5 NM Bloomfield,	119; 103; r\$ 104; p\$ 104; 103; k\$ 104; 125; k\$ 126; g\$ 126; k\$ 125;	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829	KWMW KEXS KNIM WITS KBLP KACT KZOR KALP KGNZ KFQX KEND	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1 102.7	NM TX TX IN OK TX TX TX TX TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albanerane, g\$	760 1110 1140 1250 961 981
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKFM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KKCS 101.9 CO CO Springs, 2100 KWYK 94.9 NM Astec. r\$ 2105 KRAZ 96.9 NM Farmington, 2115 KCEM 104.5 NM Bloomfield,	119; 103; r\$ 104; p\$ 104; 103; k\$ 104; 125; k\$ 126; g\$ 126; k\$ 125;	2 1743 7 1745 0 1800 0 (0, 0 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829	KWMW KEXS KNIM WITS KBLP KACT KZOR KALP KGNZ KFQX KEND	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1 102.7	NM TX TX IN OK TX TX TX TX TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albanerane, g\$	1170 961 1090 ) 760 1110 1250 961 981 1170 1216
1959 KHOY 88.1 TX Laredo, b\$ 1959 KENL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2100 KWIK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 IN Inday 2121 KGRQ 107.1 CO Pueblo, r\$	119; 103; r\$ 104; p\$ 104; 103; k\$ 104; 125; k\$ 126; g\$ 126; k\$ 125;	2 1743 7 1745 0 1800 0 (o, 0 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829 1859 7 1905	KWMW KMXS KNFM WTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW	105.1 106.3 92.3 92.3 105.1 105.5 94.1 88.1 102.7 106.5 89.1 96.3	NM TX IN OK TX NM TX TX TX NM	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, c\$	1170 961 1090 ) 760 1110 1250 961 981 1170 1216 1216
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKFM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYT 107.9 CO Pueblo, r\$ 2105 KRXZ 96.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/MAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es	1194 1097 r\$ 1044 p\$ 1044 1034 k\$ 1044 1255 k\$ 1266 g\$ 1266 k\$ 1267	2 1743 7 1745 0 1800 0 (o, 0 1800 7 1802 0 1805 0 1815 0 1815 0 1825 2 1829 1859 7 1905	KWMW KMXS KNFM WTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW KNFM	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 106.5 89.1 96.3	TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, c\$ Portales, r\$	1170 961 1090 760 1110 1250 961 981 1170 1216 1216
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKIM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2050 KRCS 101.9 CO CO Springs, 2100 KWIK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo,	1194 1075 1044 1044 1036 1256 1256 1256 1258 1259 1259 1259 1259	2 1743 7 1745 0 1800 0 (0,0) 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829 1859 7 1905 1910 5 2015	KWMW KMXS KMFM WTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW KSEL WJIS	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1 102.7 106.5 89.1 96.3 95.3 88.1	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, s\$ Bradenton, g\$	1170 961 1090 760 1110 1250 961 981 1170 1216 1216 1071 892
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2105 KRAZ 96.9 NM Farmington, 2105 KRAZ 96.9 NM Farmington, 2109 KTEA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Heard on Honda car re	1194   1077   1084   1084   1084   1084   1084   1256   1266   1275   1084   1084 	2 1743 7 1745 0 1800 0 (o, 0 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829 1859 7 1910 5 2015	KWMW KMXS KNFM KMTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW KHPM KSEL WJIS WAIJ	105.1 106.3 92.3 92.3 105.1 105.1 102.7 88.1 102.7 106.5 89.1 95.3 88.1 88.7	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, c\$ Portales, r\$	1170 961 1090 760 11140 1250 961 981 1170 1216 1216 1071 892
1959 KHOY 88.1 TX Laredo, b\$ 1959 KENL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKFM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYZ 101.9 CO CO Springs, 2100 KWIX 94.9 NM Astec, F\$ 2105 KRAZ 96.9 NM Farmington, 2105 KRAZ 96.9 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0800 KACV 89.9 TX Amarillo, (Heard on Honda car r)	1194   1077   1084   1084   1084   1084   1084   1256   1266   1275   1084   1084 	2 1743 7 1745 0 1800 0 (o, 0 1800 7 1802 0 1807 0 1815 0 1816 0 1825 2 1829 1859 7 1910 5 2015	KWMW KMXS KNFM KMTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW KHPM KSEL WJIS WAIJ	105.1 106.3 92.3 92.3 105.1 105.1 102.7 88.1 102.7 106.5 89.1 95.3 88.1 88.7	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, s\$ Bradenton, g\$	1170 961 1090 760 1110 1250 961 981 1170 1216 1216 1071 892
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2054 KKCS 101.9 CO CO Springs, 2056 KKCS 101.9 CO CO Springs, 2105 KRAZ 96.9 NM Parmington, 2106 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 NM Bloomfield, (o/WAJC 104.5 NM Bloomfield, 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Meard on Monda car composite to the compo	119;   103;   104;   104;   104;   125;   126;   125;   126;   125;   126;   126; 	2 1743 7 1745 7 1745 8 00 9 1800 9 1802 9 1802 9 1815 9 1816 9 1829 1 1829 1 1905 9 1910 9 2015 2 2021	KWMW KMXS KNFM WTTS KBLP KACT KZOR KALP KGNZ KFQX KEND KANW KSEL WJIS WAIJ	105.1 106.3 92.3 92.3 105.1 105.1 102.7 88.1 102.7 106.5 89.1 95.3 88.1 88.7	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, s\$ Bradenton, g\$	1170 961 1090 760 1110 1250 961 981 1170 1216 1216 1071 892
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKGS 101.9 CO CO Springs, 2105 KRXT 107.9 CO Pueblo, r\$ 2105 KRXT 96.9 MM Farmington, 2105 KTRAZ 96.9 MM Farmington, 2115 KCEM 104.5 MM Bloomfield, (o/MAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0500 KACV 89.9 TX Amarillo, (Meard on Monda car ro 0855 KCBI 90.9 TX Abilene, g\$ 0858 KACU 89.7 TX Abilene, g\$	1194   1075   1084   1084   1084   1084   1084   1084   1084   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285   1285	2 1743 7 1745 7 1745 9 1800 9 (o, 0 1802 9 1802 9 1815 9 1815 9 1829 1 1829 7 1905 1 1910 9 1	KWMW KMXS KMYM KMXS KMYM KMTTS KBLP KACOR KALP KGNZ KFQX KEND KANW KSEL WJIS WAIJ 1990	105.1 106.3 92.3 92.3 105.1 105.5 94.1 92.7 88.1 102.7 106.5 7 89.1 95.3 88.7	MM TX TX IN OK TX NM TX TX NM TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1110 1250 961 1170 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2100 KWYK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0800 KAGV 89.9 TX Amarillo, (Meard on Honda car r) 0855 KCEI 90.9 TX Dallas, g\$ 0858 KAGU 89.7 TX Abilene, g\$ 0950 K201BM (TX Wheeler KPD)	1194   1075   1084   1084   1084   1084   1084   1084   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 7 1745 0 1600 0 (o, 0) 1800 7 1802 0 1815 0 1815 0 1825 2 1825 2 1825 7 1905 1910 5 2015 2021 4 July 1 1 1 1	KWMW KMXS KMFM KMTTS KBLP KACOR KALP KGNZ KFQX KEND KANW KSEL WJIS 1990  WBQE	105.1 106.3 92.3 105.1 105.5 94.1 92.7 106.5 88.1 102.7 106.5 89.1 95.3 88.7	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1110 1250 961 1170 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKWM 96.5 CO CO Springs, 2056 KKWT 107.9 CO Pueblo, r\$ 2056 KKWS 101.9 CO CO Springs, 2100 KWTK 94.9 MM Astec, r\$ 2105 KRAZ 96.9 MM Farmington, 2115 KCEM 104.5 MM Bloomfield, (o/WAJC 104.5 MM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Meard on Honda car r 0855 KCBI 90.9 TX Abilene, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0930 K2OLBM (TX Wheeler KPD) 88.1 TX Canadian, g\$	1193   1037   1040   1040   1040   1031   1040   1031   1250   1250 	2 1743 7 1745 7 1745 0 1600 0 1600 7 1802 1807 1807 1807 1807 1807 1807 1807 1829 1859 1859 1905 1905 2015 2021 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	KWMW KEXS KNTM WTTS KBLP KACT KZOR KALP KGNZ KFUN KANW KENM KSEL WJIS WAJJ L990 WEQE WEQE	105.1 106.3 92.3 105.1 105.5 94.1 92.7 106.5 88.1 102.7 106.5 89.1 95.3 88.7	MM TX TX IN OK TX NM TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1110 1250 961 1170 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2050 KHY 107.9 CO Pueblo, r\$ 2055 KRCS 101.9 CO CO Springs, 2100 KWIK 94.9 NM Farmington, 2100 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Meard on Monda car r) 0855 KCBU 90.9 TX Dallas, g\$ 0930 K201BM (TX Wheeler KPD) 88.1 TX Canadian, g	1194   1075   1084   1084   1084   1084   1084   1084   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 7 1745 1800 0 (o, 0) 1802 7 1802 0 1815 0 1815 0 1825 2 1829 7 1905 1910 2 2015 2 2015 2 2015 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	KWMW KEXS KNIM KEXS KNIM KNIM KACT KACT KACP KACP KACP KACP KACP KACP KACP KACP	105.1 106.3 92.3 105.1 105.5 92.7 88.1 102.7 106.5 89.1 95.3 88.1 88.7	TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1140 1250 961 1270 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2050 KRKCS 101.9 CO CO Springs, 2100 KWTK 94.9 NM Farmington, 2100 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0500 KACV 89.9 TX Amarillo, (Mard on Monda car ro 0855 KCBI 90.9 TX Dallas, g\$ 0930 K201BM (TX Wheeler KPD) 88.1 TX Canadian, g	1194   1075   1084   1084   1084   1084   1084   1084   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 7 1745 1800 0 (o, 0) 1802 7 1802 0 1815 0 1815 0 1825 2 1829 7 1905 1910 2 2015 2 2015 2 2015 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	KWMW KEXS KNIM KEXS KNIM KELP KACT KZOR KALP KGNZ KFQX KEND KANW KHIM KANW KAIJ 1990 F WEQI WEQI	105.1 106.3 92.3 105.1 105.5 94.1 92.7 88.1 102.7 106.5 89.1 95.3 88.1 88.7	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1140 1250 961 981 1170 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKGS 101.9 CO CO Springs, 2100 KWIK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0500 KACV 89.9 TX Amarillo, (meard on Monda car r) 0855 KCBI 90.9 TX abilene, g\$ 0930 K201BM (TX Wheeler KPD) 88.1 TX Canadian, g\$ 0940 KMUW 89.1 KS Wichita, wx	1194   1075   1084   1084   1084   1084   1084   1084   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 7 1745 1800 0 (o, 0) 1802 7 1802 0 1815 0 1815 0 1825 2 1829 7 1905 1910 2 2015 2 2015 2 2015 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	KWMW KEXS KNIM KEXS KNIM KELP KACT KZOR KALP KGNZ KFQX KEND KANW KHIM KANW KAIJ 1990 F WEQI WEQI	105.1 106.3 92.3 105.1 105.5 94.1 102.7 106.5 88.1 102.7 106.5 88.1 95.3 88.1 95.7	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Albuquerque, c\$ Fortales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Fiqua-Troy) Shelbyville, ad\$ Muncie, off air.	1170 961 1090 1140 1250 961 1170 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYZ 101.9 CO CO Springs, 2100 KWIX 94.9 MM Astec, F\$ 2105 KRAZ 96.9 MM Farmington, 2115 KCEM 104.5 MM Bloomfield, (o/WAJG 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Heard on Honda car r 0855 KCBI 90.9 TX abilene, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0930 K201BM (TX Wheeler KPD) 88.1 TX Canadian, g 0931 KGAM 90.7 KS Wichita, g 0940 KMUW 89.1 KS Wichita, g 0940 KMUW 89.1 KS Wichita, wx (o/WENT 89.1 IN Fort Wayne)	1192   1075   1074   1075   1074   1074   1074   1075   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 1800 0 (o, 1800 0 1800 0 1800 0 1802 0 1807 0 1815 0 1815 0 1825 2 1829 1 1905 1 1905 2 2021 4 115 6 (o 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	KWMW KEXS KEXP WEST KACT KACT KACT KACT KACT KACT KALP KAND KAND KAND KAND KAND KAND KAND KAND	105.1 106.3 92.3 105.1 105.5 94.1 102.7 106.5 88.1 102.7 106.5 88.1 95.3 88.1 95.7	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Albuquerque, c\$ Fortales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Fiqua-Troy) Shelbyville, ad\$ Muncie, off air.	1170 961 1090 1140 1250 961 1170 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKCM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYT 107.9 CO Pueblo, r\$ 2105 KRAZ 96.9 MM Farmington, 2105 KTAZ 96.9 MM Farmington, 2105 KTAZ 96.9 MM Farmington, 2105 KTAZ 96.9 MM Farmington, 2115 KCEM 104.5 MM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KCRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Meard on Honda car r 0855 KCBI 90.9 TX Abilene, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0931 KGAM 90.7 KS Wiehita, g\$ 0931 KGAM 90.7 KS Wiehita, g\$ 0940 KMUW 89.1 KS Wiehita, wx (o/WENI 89.1 IN Fort Wayne) 0949 KEDT 90.3 TX Corpus Chr.	119; 109; 109; 109; 104; 104; 104; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 125; 126; 126; 126; 126; 126; 126; 126; 126	2 1743 7 1745 1800 0 1800 1800 1800 1802 1807 1808 1809 1809 1818 1829 1829 1905 2 1829 1910 2015 2015 2015 2015 2015 2015 2015 20	KWMW KWXS KKIPM VTTS KBLP KACT KZOR KZOR KZOR KZOR KZOR KZOR KZOR KZOR	105.1 106.3 92.3 105.1 105.5 94.1 102.7 106.5 88.1 102.7 106.5 89.1 95.7 95.7 104.9 104.9	MM TX IN OK TX IN OK TX IN OK TX IN	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Mobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$	1170 961 1090 1140 1250 961 981 1170 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBML 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2054 KKCS 101.9 CO CO Springs, 2054 KKCS 101.9 CO CO Springs, 2105 KRXZ 96.9 NM Farmington, 2105 KTRZ 96.9 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/MAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 E8 0800 KACV 89.9 TX Amarillo, (Meard on Honda car ro 0855 KCBI 90.9 TX Dallas, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0930 K201BM (TX Wheeler KPD 88.1 TX Canadian, g 0940 KMUW 89.1 KS Wichita, g 0940 KMUW 70.5 TX Corpus Chr. 0955 KKBQ 92.9 TX Pasadena, g	119;   107;   108;   108;   108;   104;   103;   125;   126;   125;   126;   125;   126;   125;   126;   125;   126;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;   127;	2 1743 7 1840 1800 1800 1800 1800 1800 1800 1800	KWNW KHXS KNIPM VITTS KBLP KACT KACT KACK KFOX KFOX KFOX KEND VSI 1990 F WAIJ VGLE F WEJT VGLE WLJT WIND	105.1 106.3 92.3 105.1 105.5 105.5 105.7 106.5 88.1 102.7 106.5 88.1 102.7 106.5 105.7 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106.5 106	MM TX IN OK	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Fiqua-Troy)  Shelbyville, ad; Muncie, off air, Traverse City, g Ironwood, r\$	1170 961 1090 1140 1250 961 1216 1216 1071 892 959
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, b\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2054 KKCS 101.9 CO CO Springs, 2054 KKCS 101.9 CO CO Springs, 2105 KPAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 IN Indy) 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0800 KACV 89.9 TX Amarillo, (Heard on Honda car r 0855 KCBI 90.9 TX Dallas, g\$ 0858 KACU 89.7 TX Abilene, g\$ 0950 K201BM (TX Wheeler KPD)  88.1 TX Canadian, g 0940 KMUW 89.1 KS Wichita, g 0940 KMUW 89.1 KS Wichita, g 0940 KMUW 89.1 IN Fort Wayne) 0955 KKBQ 90.9 TX Corpus Chr. 0955 KKRQ 90.9 TX Corpus Chr. 0955 KKRQ 92.9 TX Fasadena, e 0954 KLTR 93.7 TX Houston, mr	1194   1075   1084   1084   1084   1084   1084   1084   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256   1256	2 1743 7 1745 1800 0 (o, 1800 7 1802 1802 1802 1802 1815 0 1815 0 1825 2 1859 1905 1910 5 2015 2 2011 1546 0 (o, 2015 2 2011 1546 0 (o, 2015 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	KWNW KEXS KRIPM VITTS KBLP KACT KACT KACK KEND KACT KANW KEYM KSEL VJIS VJIS VWAIJ 1990 VGLE VWAIJ VGRE VGRE VGRE VGRE VGRE VGRE VGRE VGRE	105.1 106.3 92.3 105.1 105.5 94.1 192.7 88.1 102.7 106.5 89.1 95.7 88.1 106.5 106.3 95.7 95.7	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Piqua-Troy) Shelbyville, ad\$ Muncie, off air Traverse City, g Frankfort)	1170 961 1090 760 1110 1140 1250 961 981 1170 1216 1071 892 959 70
1959 KHOY 88.1 TX Laredo, b\$ 1959 KBNL 89.9 TX Laredo, S\$ 2015 KTSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2042 KRCC 91.5 CO CO Springs, 2054 KKCM 96.5 CO CO Springs, 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRYT 107.9 CO Pueblo, r\$ 2056 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Bloomfield, (o/WAJC 104.5 NM Bloomfield, (o/WAJ	1193   1037   1040   1073   1040   1040   1050   1040   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050	2 1743 7 1745 1800 0 1800 1800 1800 1800 1800 1800 18	KWHW KEIXS KNIMM KNIMM KNIMM KKIMM KACH KACH KACH KACH KANW KNIMM	105.1 106.3 92.3 105.1 105.5 94.1 102.7 106.5 88.1 102.7 106.5 89.1 95.7 104.9 95.7 104.9 104.9 104.9	MM TX TX IN OK TX	Maljamar, k\$ Abilene, k\$ Midland, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Kobbs, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, c\$ Fortales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Fiqua-Troy)  Shelbyville, ad\$ Muncie, off air Traverse City, gironwood, r\$ Frankfort) Marquette, r\$	1170 961 1090 760 1110 1250 961 981 1170 1216 1071 892 959 70
1959 KHOY 88.1 TX Laredo, \$\$ 1959 KBNL 89.9 TX Laredo, \$\$ 1959 KBNL 89.9 TX Laredo, \$\$ 2015 KYSC 89.5 CO Pueblo, r\$ 2033 KEPC 90.5 CO CO Springs, 2044 KKFM 96.5 CO CO Springs, 2050 KRYT 107.9 CO Pueblo, r\$ 2054 KKCS 101.9 CO CO Springs, 2100 KWWK 94.9 NM Astec, r\$ 2105 KRAZ 96.9 NM Farmington, 2109 KTRA 102.1 NM Farmington, 2115 KCEM 104.5 NM Farmington, 2121 KGRQ 107.1 CO Pueblo, r\$ 27 Es 0500 KACV 89.9 TX Amarillo, (Mard on Honda car r 0855 KCBI 90.9 TX Amarillo, (Meard on Honda car r 0855 KCBI 90.9 TX Abilene, g\$ 0950 K201BM (TX Wheeler KPD)  88.1 TX Canadian, g 0940 KNUW 89.1 KS Wichita, g 0940 KNUW 89.1 KS Wichita, g 0940 KNUW 89.1 KS Wichita, g 0955 KKBQ 90.9 TX Corpus Chr. 0955 KKBQ 90.9 TX Corpus Chr. 0955 KKBQ 92.9 TX Pasadena, e 0954 KLTR 93.7 TX Houston, mr	1193   1037   1040   1073   1040   1040   1050   1040   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050   1050	2 1743 7 1745 1800 0 1800 1800 1800 1800 1800 1800 18	KWHW KEIXS KNIMM KNIMM KNIMM KKIMM KACH KACH KACH KACH KANW KNIMM	105.1 106.3 92.3 105.1 105.5 94.1 102.7 106.5 88.1 102.7 106.5 89.1 95.7 104.9 95.7 104.9 104.9 104.9	MM TX TX IN OK TX TX NM	Maljamar, k\$ Abilene, k\$ Midlend, k\$ Bloomington-Indy Lindsay, k\$ Andrews, ad\$ Alpine, k\$ Abilene, g\$ Merkel, r\$ Roswell, k\$ Albuquerque, s\$ Albuquerque, c\$ Portales, r\$ Bradenton, g\$ Fort Myers, g\$  Attica, j\$ Piqua-Troy) Shelbyville, ad\$ Muncie, off air Traverse City, g Frankfort)	1170 961 1090 760 1110 1250 961 981 1170 1216 1071 892 959 70

SEPTEMBER 1990

3 tr (Jul	y)				11 Es (J	uly)			
		WI	Rhinelander, nx\$	430	2228 KIL	0 93.9	CO		040
0607 WHWL	95.7	MI	Marquette, nx\$	470	2230 KEF	C 90.5	CO	CO Springs, r\$ 1	040
4 tr					19 Es				
OZ3O WYFG	91.1	SC	Gaffney, g\$,		1045 WMC				040
			Previous MS					Control of the second s	098
0302 WREK			Atlanta, p\$					Armin O. L. L. M. Market J. Mark.	118
0417 WRVL	88.3	VA	Lynchburg, g\$	375					192
6 tr				- 1					928
0458 KZKX			Seward-Lincoln, ki						108
0952 KXCV	90.5	MO	Maryville, j\$	500				San Antonio, mr# 1	
7 Es				2000					050
1114 KBNL	89.9	TX	Laredo, g\$					Fredericksburg, \$ 1	
			Corpus Chr., r\$						961
1453 KAJA	97.3	TX	San Antonio, k\$						780
1527 KGNZ	88.1	TX	Abilene, g\$	961					.090
8 Es									738
1330 WEAT	104.3	FL	W. Palm Beach, b\$					Lockwood of Edmond	
1337 WKQL	96.9	FL	Jax, r\$, ex-WAIV	712	1230 KOC	C 88.9	OK		738
1338 WQCS	88.9	FL	Fort Pierce, e\$	926	1243 KTC				.059
1415 WUWIF	88.1	FL	Pensacola, c\$		1245 KET			Perryton, r\$, nx,	
1546 WSEB	91.3	FL	Englewood, g\$	930	("IM-96"	servin	g ti	he TX & OK Panhandl	
			Craig, r\$		1259 KL				216
2013 KSID	98.7	NE	Sidney, r\$	928	1300 KSI	V 95.3	CO		150
2014 KOSI	101.1	CO	Denver, mr\$	1040	1313 KAS	SE 100.7	TX	Austin, k\$	
2031 KIMX	105.5	WY	Laramie, ad \$	1060	1329 KET	rR 88.9	TX		748
2048 KSIT	104.5	WY	Rock Springs, r\$	1255	1340 KE	88.3 MC	TX	Mesquite, r\$	808
(o/WAJC	104.5	IN	Indy)		1401 KM7				809
2058 KLEN	106.3	WY	Cheyenne, b\$	1020	1446 KGP	Z 88.1	TX	Abilene, g\$	961
2103 KKAZ	100.7	MI	Cheyenne, r\$	1020	1512 KM			Wichita Falls, g\$	
11 Es					1537 KM	IN 92.9	TX	Wichita Falls, r\$	843
1725 KRST	92.3	MM	Albuquerque, k\$	1216	(o/WG9	2 92.9	OH	Eaton-Dayton)	
			Fort Collins, j\$	1070	28 tr				
			Fort Collins, r\$	1070	0921 WNI	RJ 105.7	OH	Marysville, r\$,	125
2100 KUWR			Laramie, j\$		1 / /		-	Indy) "Power-105	- (71)

#### Meteor Scatter Results:

5/7 WAYJ "...Before long, Southwest Florida area school children will hear their last bell ring for the year. Seniors will proudly walk their ceremonial round to receive their long awaited diplomas. Remember your graduation night? The thrill when your name was called, and the feeling that you finally learned it all? Now as the years go by, it's funny to think about how much you've thought ... . learning about life...for contemporary Christian music. If you appreciate 'Way-TM,' write this week, and remember we're listener supported radio ... " (60 second burst)

5/12 WKGR "...concert, and we here at KGR radio ... " 5/13 WGYL "...let's hear from you. Send your entry to the anniversary ... WGIL ... " 5/16 WMZQ "...ZQ..." 5/20 KKCS "...Colorado Springs..."

15/20 KKCS "...and the Springs... home at clear skies ... " KQXT "...address and phone number to KQ-102..." 5/22 KILT "...KILT..." 6/ 4 KRVS "...on KRVS 88.7 FM..."

6/19 WCIE "... WCIE will be broadcasting live... and the crew. There'll be a few others dropping by. There'll be free hot dogs and pepsi and a great time. Se for the free concert and celebration of the grand opening of the Fire Escape Youth Center, come to 5303 S. Florida Ave. in the Lakeland South Center, Saturday June 23rd at 7:30 until 10:30 p.m., and WCIE will be there looking for you..." (40 sec)

The E-skip season began with a big bang, but seems to have fizzled out in late July. Today is July 29th and there has been no skip since the 19th. To be able to log distant stations through semi-locals is a treat. I was able to log stations through strong semi-locals in Richmond, IN (40 miles), Kokomo, IN (44 miles), Indianapolis, IN (50 miles), Fort Wayne, IN (62 miles), Piqua, OH (59 miles), and Dayton, OH (67 miles). As far as I could tell, I didn't miss any Es openings this summer. You can see from my report that all Es here was to the NW, W, SW, S, or SE. There has been no skip to the New England or French Canada areas as yet this summer. Those areas have been rare in previous years also. The few days of tropo have brought me some new stations, but tropo conditions this summer have been very mediocre. Danny Buntin's remarks regarding the 1980 tropo was certainly true! Those who were not DXing in 1980 missed something that I doubt we will ever see again! Let's hope the August meteor showers will produce some good DX: 73-Kalak-

RICHARD K. SHAFTAN - 39 OLD MIDDLETOWN ROAD - ROCKAWAY TWP, NJ 07866 Equipment same as last time (201) 586-3563 24 TrS/GW (in car) 1415 WJBR 99.5 DE Wilmington, WBAI off

I-80, exit 39, Denville, NJ 1645 107.7 WSNJ/WGNA mlx (at QTH) 1945 WNCE 101.3 PA Harrisburg, u/WKCI with lame

0929 WCTQ 92.1 FL Venice, ID 0910 WSEB t 91.3 FL Englewood, religion 0911 unID 91.7 with Latin music no 15 WJIS 88.1 FL Bradenton, Joy FM

in again on car radio at 1432 2254 unID 88.5 with Latin 2258 KUMR 88.5 MO Rolla, ID, with University

of Missouri program 2347 KNYD 90.5 OK Broken Arrow, ID w/Bill N. 2348 WQUE 93.3 LA New Orleans, Q-93 ID 2349 WQID 93.7 MS Biloxi, disco 2353 KBEZ 92.9 OK Tulsa, ID // Bill N 2354 WMXZ 95.7 LA New Orleans, Mix 95.7

2358 WYLD 98.5 LA New Orleans, soul music 0007 WKMC 101.7 MS Collins c/w, Take an Ozark Vacation

0010 WLTS t 105.3 LA Slidell, lame, blowing out Phila and local on 105.5 0012 KMDL 97.3 LA Kaplan, c/w, ID 0017 KHOM 104.1 LA Houma, soul, ID

0021 KROF 104.9 LA Abbeville, ID as KROF AM and FM 0024 WAKH 105.7 MS McComb, ID with Bill N

0026 WJMI 99.7 MS Jackson, Power 99 0031 WYNK 101.5 LA Baton Rouge, ID

0033 unID 102.1 k, is Basile, LA on the air vet? 0034 KBIU 103.7 LA Lake Charles, Bayou 104 0059 KNTU 88.1 TX Denton, ID with Bill N

0108 KTUX 98.9 TX Carthage, Tux 99

2212 WKPE 104.7 MA Orleans, Cape 104 2230 WAAF 107.3 MA Worcester , ID 2244 WHCN 105.9 CT Hartford, thru local WNWK

2256 WESR 103.3 VA Onley, ID, rare 2306 WOCB 94.9 MA Yarmouth, Talknet, NBC news

2316 WFCR 88.5 MA Amherst, classical, ID 2321 WSRS 96.1 MA Worcester, ID

2328 WPLR 99.1 CT New haven, on top of local WAWZ 2354 WODS 103.3 MA Boston, Oldles 103

0014 WKHI 99.9 MD Ocean City, Power 99.9 0110 WVBF 105.7 MA Framingham, weak thru WQSR

0118 WIBF 103.9 PA Jenkintown, religion o/WFAS 0150 WROR 98.5 MA Boston, ad for service for

**Boston Singles** 0158 WGTY 107.7 PA Gettysburg, Country 108 0207 WZXL 100.7 NJ Wlidwood, ID

0225 WCGY 93.7 MA Lawrence, ID 0240 WOKQ t 97.5 NH Dover, c/w thru WPST/WALK

0305 WYCL 107.5 PA Boyertown, thru local WBLS

0324 WZOU 94.5 MA Boston, ID w/rock over Trenton 0332 WBOS 92.9 MA Brookline, ID

0339 unID 95.9 , ID as Lite 96 FM

0401 unID 88.9 ABC news, maybe WJMJ relog 0408 WJIB 96.9 MA Boston, muzak, ID o/WFPG 0421 WXLO 104.5 MA Fitchburg, ID after Wille Nelson

0426 unID 92.5 lame behind WWYZ/WXTU JUNE 1990 1 Trs

1210 WXPN 88.9 PA Philadelphia, one of my nearest unheards

2 Es 1450-1457 2 uniDs on 88.5

0030 WXTR 104.1 MD LaPlata, Extra 104 0127 WYCR 98.5 PA York, 98.5 YCR 0128 WGCB 96.1 PA Red Lion, religion, rare

JUNE 1990 DX

0131 WARM 103.3 PA York, Warm 103 0134 WHKS 94.9 PA Harrisburg, New Cool 94.9, also IDed as 94.9 FM

0145 WBJC 91.5 MD Baltimore, local strength 0159 WBSB 104.3 MD Baltimore, B 104 through WNCN 0203 WJBR 99.5 DE Wilmington, thru local WBAI

0210 unID 107.3 religion (DuBois?-gc) 0211 UNID 105.9 Grateful Dead Hartford? Washington?

0213 WXCY 103.7 MD Havre de Grace, Extra 103, no WNNJ 0219 WHUR 96.3 DC Washington, local strength 0227 unID 91.3 request line 451-2701

0229 unID 88.1 discussion on hearing impaired 0247 WSVS 104.7 VA Crewe, C/W clear in stereo, "Southside's best country, one of my farthest trops" 0304 WIBF 103.9 PA Jenkintown, domineering, playing

James Brown instead of religon. 0320 WGTS 91.9 MD Tacoma Park, solid 0335 WKRB 90.9 NY Brooklyn, sign off

0339 WRIU 90.3 RI Kingston ID, heavy metal, with request line 401-272-8866

0341 WWUH 91.3 CT Hartford, ID 0345 WNTX 96.3 MA Nantucket, Oldies 96

2242 WRQX 107.3 DC Washington, domineering w/Q107 2245 WFMV 106.3 NJ Blaristown, close but usually waek now IDs as classic hits 106

13 TrS 1808 WMRV 105.7 NY Endicott, ID w/WQSR/WQXA.Finally

0753 unID 104.1 lame Harrisburg? (or Waterbury-gc) 1023 WRSE 105.7 NC Columbia, Surf 106, local quality

1024 WMYK 93.7 NC Elizabeth City, disco, ID

1031 WFOG 92.9 VA Suffolk, ID 1032 WJQI 94.9 VA Norfolk, New Joy 95

1046 WNOR 98.7 VA Norfolk, thru local WRKS 1048 WYFI 99.7 VA Norfolk religiom

1049 WCMS 100.5 VA Norfolk, ID 1054 WZCL 105.3 VA Norfolk, Cool 105.3, oldies

1058 WKSV 96.1 VA Cape Charles, Soul, ID- WKSV Cape Charles, Virginia Beach, Hampton.

1103 WWDE 101.3 VA Hampton, 2WD, Jame 1107 WLTY 95.7 VA Norfolk, ID

1107 WNVZ 104.5 VA Norfolk, Z-104 1120 WGH 97.3 VA Newport News, ID

1123 WAFL 97.7 DE Milford, lame "Waffle" (They were a mix of a/c and top 40 rock when I was in Ocean City-ac) 1322 uniD 104.1 muzak

17 TrS in car coming back from Paul Mount's 0000 WSRS 96.1 MA Worcester (near Aberdeen NJ)

0050 WXYV 102.7 MD Baltimore, thru WNEW FM (Bedminster, NJ, on I-287, behind "The Hills" development) 0130 WGBH 89.7 MA Boston, local (Denville, NJ) 0244 WKSZ 100.3 PA Media, Thru WHTZ (at home)

0251 WHYY 90.9 DC Washington, classical, ID mixed with WKRB and WHYY off.

0319 WSRF 105.7 NC Columbia, Surf 106 0324 WHJY 94.1 RI Providence, Along Came Mary 0333 unID 96.7 disco, could be semi local WTSX, which is rare here

0339 WAFL 97.7 DE Milford, soul music 0343 WYFI 99.7 VA Norfolk, religion 0346 WZBH 93.5 DE Georgetown, The Beach, Grteful Dead. confinued.....

	RICHARD SHAFTAN'S
JUNE 17 Tropo	
0422 WJQI 94.9 VA Norfolk, A	All New Joy 95
0447 WFOG 92.9 VA Suffolk,	ID
0451 WSFL 106.5 NC New Be	rn, Solid Gold Sat Nite
ID, mixed with WHLM	, Power 106 -
2202 WWLI 105.1 RI Providen	ce, lame under WNSR, ID
2322 WCAV 97.7 MA Brockto	on, c/w undert WCTY, ID
2330 <u>WUMB</u> 91.9 MA Boston,	
2332 WBOS 92.9 MA Brooklin	
2333 WMJX 106.7 MA Boston	
2336 WCIB 101.9 MA Falmou through WCB	th, thru WQCD, ID, nothing IS-FM on 101.1 though.
2339 WJBR 99.5 DE Wilmingto	on, way on top of WBAI

0010 WILL 98.3 CT Willmantic, Manic Monday, ID, one of my nearest unheards.

19 Tr (freak opening to DC)
0900-0905 88.5.89.3,107.3 very strong, chs 20,26,32 local
0911 WKY\$ 93.9 DC Washington, soul under WNYC
0918 WGAY 99.5 DC Washington, muzak under WBAI
0920 WMZQ 98.7 DC Washington, C/W u/WRKS
0922 uniD 97.1 lame under WQHT. Pr. WASH

0014 WNNN 101.7 NJ Canton, another one near that was not heard before.

26 Es: fast moving cloud, nothing in for more than 1 min. 1832 <u>WXD.1</u> 95.7 FL Homestead, latin, ID // Bill N. I guess there is a format change

1834 <u>WAAC</u> 92.9 GA Valdosta, C/W, ID // Bill N. 1900 WUWF 88.1 FL Pensacola, ID

1911 <u>WEGS</u> 91.7 FL Milton, religion 1921 unID 92.1 Coastal Waters Forecast 1927 <u>WBLX</u>† 92.9 AL Mobile, soul, on top at 2000 1932 WKPX 88.5 FL Sunrise, rockin Reggae show, ID

1932 WKPX 88.5 FL Sunise, rockin Reggae snow, ID 1945 uniD 89.3 Spanish. Then ID at 1953 as "Urban Alternative—Biblical Challenge for Change"

1947 WHIL 91.3 AL Mobile, Monitor Radio, APR 2002 uniD 89.3 program about Cuba 2003 <u>WBHM</u> 90.3 AL Birmingham, Operation Birmingham

2006 <u>WZEW</u> 92.1 AL Fairhope, Hard Rock, 92 Zoo 2011 uniD 94.9 Jozz

2011 WKS.It 94.9 AL Mobile, Marshall Tucker, wx, hl of 91, low of 68

2011 WZTA 94.9 FL Miami Beach, Zeta 94
2016 WZLMt 97.3 AL Dadeville, ad for Hwy 280 Produce
Only station on 97.3 near US 280

2016 WJYFf 95.3 GA Nashville, Atlanta Braves with
Steve Avery pitching
2030 KLBJ 93.7 TX Austin, RR, ID, ads, farthest Es, I think

2030 KLBJ 93.7 TX Austin, RR, ID, ads, farthest Es, I think 2044 <u>KMTB</u> 95.3 AR Murfreesboro, B-95, SW Arkansas 2046 <u>KOOL</u> 94.9 AR Pine Bluff, Cool 95, Oldies 2109 KZPS 92.5 TX Dollas

2109 unID 92.1 Country 92 2128 unID 98.3 Lite 98.3 2303 unID 92.1 classical

2310 KBEZ 92.9 OK Tulsa, ID

0912 KUMR 88.5 MO Rolla, Bluegrass, ID 0936 <u>KDHX</u>† 88.1 MO St.Louis, Icl sps, Lambert Airport 0951 <u>KCUR</u> 89.3 MO Kansas City, ID

0952 <u>KUC†</u> 88.5 MO Kansas City, religion 0954 <u>KKF</u> 90.1 MO Kansas City, ID 0954 <u>KLSI</u>† 93.3 MO Kansas City, ads, ID Mix 93

0955 KCMO 94.9 MO Kansas City as for "Kansas City's own" Bellefonte Frozen Yogurt

0956 <u>KMBR</u> 99.7 MO Kansas City, ID as "99.7 FM", CDT Request line 576-7777 (Richard, I removed the tent. mark. I checked the phone book here at the library and that phone no. is in fact KMBR-gc)

JUNE 28 Es continued. 0956 KYYS 102.1 MO Kansas City, KC's K-102

0958 KUDL 98.1 KS Kansas City, ID
0959 KFKE 94.1 KS Kansas City, C/W under WYSP
1001 KRXL 94.5 MO Kirksville, as for Greensmith Hospital
which is in Kirksville, ID sounded like 94 Now

1011 <u>KTGL</u> 92.9 NE Beatrice, The Eagle 92.9 1023 <u>WOW</u> 94.1 NE Omaha, ads, ID 1034 <u>KKRL</u> 93.7 IA Carroll, C/W, ID

nothing 1037 <u>K.JJY</u> 92.5 IA Ankeny., ID 1127 Es brifely back to 88.5

1654-1712 Es brifely back as high as 89.3 at least. JULY 1 Es

1055 KBEZ 92.9 OK Tulsa, Muzak 1057 <u>KKNG</u> 92.5 OK Oklahoma City, Religion // Bill N 1101 <u>KSPI</u> 93.7 OK Stillwater, news, Classic 93.7

2 GW & Es 2148(WQQQ) 96.7 CT Stamford, All New Q 96.7, oldies 2305 KTGL 92 9 NE Beattrice, ID, Tom Petty

2305 KTGL 92.9 NE Beatrice, ID, Tom Petty

3 TIS & Es

0955 WGTS 91.9 MD Tacoma Park, wx and ID

1214-1217 uniDS 89.3 and 90.1 2328 uniD 94.9 Good Time Oldies on Oldies 94.9

4 If USSA WCRE 103.3 OH Cleveland, USA Radio News, weak to WPRB sign on, ID // Bill N who gets all this North and west stuff much better than I.

and west stuff much befret fran I.

0654 <u>WKXA</u> 100.5 OH Findlay, Madonna, ID // Bill N
0714 <u>WNNK</u> 104.1 PA Harrisburg, Wink 104, ID
0730 <u>WKBN</u> 98.9 OH Youngstown, ID // Bill N
0740 <u>WHWK</u> 98.1 NY Binghamton, Hawk, ID
0810 WOJX 100.9 NY Horseheads, c/w mention Rte. 1

0810 WQIX 100.9 NY Horseheads, c/w mention Rte 14 In Milton, thought it was WOEZ, til I checked my tape and my atlas.

0820 WXBB 97.3 PA Harrisburg, strong 0850 WBOS 92.9 MA Brookline, Billy Joel, ID 0910 unID 95.7 Iame thru WFLN/WKSS

0930 WCTK 98.1 MA New Bedford, exceptionally strong WKPE, WSNE also in,

1007 WHKS 94.9 PA Harrisburg, Cool 94.9 1150 unID 92.1 religion

6 Es 0750 KLRA 96.5 AR England, ID 0755 WMC 99.7 TN Memphis, Very strong

0759 <u>KAIO</u> 100.9 AR Arkadelphia, ARN news, IDded after call to station who told me Joe Fela had written.

0806 <u>KZOU</u> 98.5 AR Little Rock, Zoo 98, disco 0813 <u>KSSN</u> 95.7 AR Little Rock, Kiss 96, ID 0816 <u>KQUL</u> 94.9 AR Pine Bluff, Cool 95, ID

0819 KHLT 94,1 AR Little Rock, ID 0820 unID 97.3 COuntry 97 0825 unID 97.3, ment Hampton Twnship (WGH?-gc)

0825 unID 97.3, ment Hampton Twnship (WGH?-gc)
2015 KTGL 92.9 NE Beatrice, in 4 or 5 times this summer
2050 KCDW 92.1 MO Sedalia, ID // Bill N

2052 KZOC 92.9 KS Osage City, c/w, ID

2102 KYOO 98.5 OK Tulsa, ment local congressman election, representing S and E of Tulsa

2120 WKRB 90.9 NY Brooklyn, B-91 under WHYY

1834 unID 95,3 Oldies mixed with religion which I belive to be WTLN, Apopka, Florida.

1841 WVFMt 94.1 FL Lakeland, Muzak

1852  $\underline{\text{WYUU}}$  92.5 FL Safety Harbor, My Sweet Lord // Bill N 8 TrS

0115 WMRV 105.7 NY Endicott, Lite Rock 105.7, rare

continued on the next page

#### RICHARD SHAFTAN's report continued

JULY 8 Es cont.

JULY 8, 1990 Es 1413 WJMI 99.7 MS Jackson, soul, Power 99 1420 WZIX 100.1 MS Artesia, Z-100. Golden Triangle 1423 KQQK 106.5 TX Galveston, ID // Bill N. 1425 KBYO 104.9 LA Tallulah, c/w, ID 1429 WLTS 105.3 LA Slidell, Barry Manilow 1430 KMYQ100.1 LA Bastrop, ID 1432 KUEZ 99.3 TX Luftkin, soul, ID 1437 WMXGt 100.5 MS Macon, religion 1440 WMC-FM 99.7 TN Memphis, FM 100 1441 KYKX 105.7 TX Longview, c/w, local ments 1445 KISX 107.3 TX Whitehouse, Sam Cooke, Kiss 107 1456 WKQL 96.9 FL Jacksonville, Bob Seger, ID 1459 KVTT 91.7 TX Dallas, ID 1502 WJXR 92.1 FL Maccieny, c/w ID 1503 KLTY 94.1 TX Fort Worth, religion 1513 KNIN 92.9 TX Wichita Falls, ID 1519 KZOU 98.5 AR Little Rock, disco, Zoo 98 1540 KTLS 93.3 OK Ada, Stereo 93 1547 unID 101.3 c/w, mention of Ackertown, nonID, "Country...." 1554 KBEZ 92.9 OK Tulsa, K-Mart ad 1554 KRAY 96.5 OK Tulsa, ID with KGTO 1559 KNYD 90.5 OK Broken Arrow, ID 1600 KSPI 93.7 OK Stillwater, ID 1606 KVOO 98.5 OK Tulsa, c/w 1607 uNID 99.3 baseball-weak 1609 KFDI 101.3 KS Wichita, local mentions 1613 KKRD 107.3 KS Wichita, AT40, thru WAAF 1615 KMAJ 107.7 KS Topeka, Steve Miller, local wx 1618 KWKL 106.5 KS Arkansas City, very strong 1620 KTPK 106.9 KS Topeka, Country 107, ID o/WKDN 1624 WMC 99.7 TN Memphis, still in after 2 hrs 1640 WYLD 98.5 LA New Orleans, FM98 mix w/KZOU 1646 KHLT 94.1 AR Little Rock, K-Lite 1649 WQUE 93.3 LA New Orleans, Q-93, c/w (Richard, you sure about the format; they're 'rs'-gc) 1654 WDJC 93.7 AL Birmingham, local ment Hwy 31 1656 uniD rocker thru WCHR, ID sounded "KMA"? 1657 WXLT 94.1 MS MacComb, Sunny 94, ID 1700 WQXY 95.7 LA New Orleans, disco (calls are now WMXZ-gc)

1719 uniD 91.3 Atlanta Symphony Orchestra 1730 KBEZ 92,9 OK Tulsa, Musak 1741 KZBS 98.9 OK Oklahoma City, ID thru Philly 8 TrS 2121 WCTX 92.1 PA Palmyra, Nell Diamond, ID 8 Es again 2136 unID 92.5 call in show, "Magic....OY?" 2150 unID 94.5 USA Radio News covering Rodeo 2215 unID 93.3 jazz KTGL 92.9 Beatrice, NE in until 2250 8 TrS 2253 WETA 90.9 DC Washington, cl, ID thru WHYY 2320 WKLX 98.9 NY Rochester, ID 2337 WVOR 100.5 NY Rochester, ID 2346 WMJQ 102.5 NY Buffalo, Niagara Falls Flea Mkt. 0011 WLTJ 92.9 PA Pittsburgh, very lame, ID #500. 0159 unID 106.9 disco 11 GW/Tr\$ 1843 WXCN?? 88.5 That's what ID sounded like. Is WXPN now on 88.5? 14 Es, in all day to ch 3, finally into FM 2334 WSCD 92.9 MN Duluth, classical 0000 WFCR, WAQY, WGNA all ID 0100 unID 106.5 Dr. Dimento July 17 Tr\$ 1651 WPYX 106.5 NY Albany, finally, Pix 106, ID 18 Es 1903 WMAA 91.3 MS Jackson, NPR nx, very strong 1905 WFFN 92.9 AL Cordova, Country 93 WFFN, ID 1908 WRJHt 97.7 MS Brandon, religion 1911 KSMB 94.5 LA Lafayette, disco o/WCHR, ID 1943 unID 92.9 Steve Miller o/WMGS, pr KTGL, hi. 1712 unid SS - mention of San Jose, help!! (What was the frequency?gc) 28 GW/TrS 1157 WGBI 101.3 PA Scranton, v.strong over usually

1701 WBBN 95.9 MS Taylorsville, gatorade ad, ID

(calls are now WMXZ-gc)

Locals are nulled easier through use of a Radio Shack variable attenuator. I have it hooked on the 300 ohm side of my Radio Shack FM amp input, with the aerial on the 75 ohm side. By tuning it, sometimes locals or dominant can be erased, with juicy DX underneath. Unfortunately, I think this item has been discontinued, but I bought mine at the Sanmar Electronics Radio Shack in

Rockaway on Rt 46. Next DX purchase, another Winegard aerial to stack underneath my CS 6065. What a month. Thanx to Bill N for helping me ID those weak ones. Totals now 505/32+/3/2. stations, stated, provinces, countries. Texas is now my best Es state with 21. Louisiana is second with 20, Florida third with 18. 73

JOEL ROSENBURG, M.D - 19 GLENAYR RD - RICHMOND HILL, ONTARIO L4B could be supported by the support of the suppo

Equipment is Marante 125 tuner, Delhi 6 el	ement FM yagi rotatable at 50 feet AG.	*
MAY 27, 1990 Es	JULY 6 Es. from car. DXing is not the safest	thing to
1910 KILI 90.1 SD, 1940 opening gone	do at 60 MPH!!	uning to
29 Es	1130 0810 WWNO 89.9 LA New Orleans	1120
2003 KETR 89.9 TX Commerce 2007 unID 98.7 oldies (likely Dallas-gc)	0813 WBSN 89.1 LA New Orleans	1120
2021 KCYY 100.3 TX San Antonio, Y-100	1440 0817 WCKW 92.3 LA LaPlace	
2025 KZPS 92.5 TX Dallas	1200 0819 WMAH/V 90.3 NPR probably Biloxi	
2028 unID 93.3 TX B-93-FM (KBTS Killeen-gc)	2106 WMPR 90.1 MS Jackson	985
2043 KFAN 101.1 TX Fredericksburg	1440 GW	
2059 UnID 88.3 Texas State Network	2128 99.1 Toronto see note #1	16
2101 KSTX 89.1 TX San Antonio	1440 8 Tr	210
2107 ? 90.1 TX Commerce	1130 1006 WMXD 92.3 MI Detroit 1011 ? 97.1 MI Detroit The Breeze	210
JUNE 16 Tr		210
1134 WFRO 99.1 OH Fremont	20 GW 1509 CJLX 91.9 ON Toronto, see note #2	16
1839 WLZW 98.7 NY Utica	Joel's notes are on the following page	10

Note #1; FM Simulcast on 99.1 (3 kw ERP) of Digital Radio Experiment with DOC authorization (July 5-15 incl.) on old CKO freq., no calls assigned. Six hour sets of several TO stations, such as AM- CKEY. CFTR, FM-CBL, CHFI, CJCL, CHUM, CILQ, CFNY. Note #2: "Molstar Indy Network" simulcast of Molson Indy play by play - July 20-22 (incl) 10 watts from CN Tower, cleanly heard in car to 2.5 miles, but faded in for seconds occasionally out as far as 12 miles. At home-light fade on regular equipment-distance 16 miles. Adjacent channel interference from CKPC Brantford 50 kw at 60 miles. 73, Joel

BOB SEYBOLD - 10567 BENNETT RD. - DUNKIRK, NEW YORK

July 8- huge skip opening covering entire FM band, running several hours 1200-2200. As many as five on same frequenct in and out but were very steady. Started in Florida, also Cuba in, then covered every state along the Gulf. then up into Texas, Arkansas, Oklahoma, Kansas, Nebraska, Iowa, and the Dakotas finally. Some stations logged: WAGH 98.3 Fort Mitchell, Ala., WRBA 95.9 Springfield, Fla, WDEC 94.3 Georgia, KLAK 97.5 Durant, Okla, KNIN 92.9 Wichita Falls, Tex., KBAU 94.3 Galliano, La., New Orleans 97.1, 91.5, 101.1, 95.7, Eupora 101.7, Hot Springs 97.5, Little Rock 90.5, 94.1, 103.7, Baton Rouge 98.1, Jackson, Miss. 90.7, 96.3, 99.7; Dothan, Ala. 95.5, Dawson 92.1, Pensacola 89.3, North Platte 97.1, Lexington 93.1, Mitchell 102.3, Rapid City 93.9, Emporia 104.9 Wichita 91.1, 95.1, 107.3, Springfield, Mo. 98.7 McAlester 101.3, Oklahoma City 100.5, Tulsa 92.9, 95.5, Wichita Falls 99.9, Amarillo 93.1, 94.1, Shreveport 93.7, 100.1, Houston 91.7, 94.5, 100.3; Atlanta 88.5, 90.1, 94.9, Bainbridge, Ga. 97.3, Jacksonville 95.1, 96.1, Dublin, Ga. 92.7, Ft. Smith Ark. 93.7, 100.9, Troy, Ala 105.7 and many more unIDed. To me this was a big opening-TV was wild.

dBRUCE HALL c/o 141 KING GEORGE ROAD - BRANTFORD, ONTARIO N3R 5K7 Equipment: JVC, JR-S 201 Receiver (modified with 3 150 khz filters), Pioneer SX550 receiver (modified with 1 150 khz filter), Magnum Dynalab 205 Signal Sleuth, Stereo Probe 9 fed with otor (Ed. Distances are in kilometres) JUNE 26 GW/TrS

RG6 at 50 ' AGL, CM rotor (Ed: Distances	s are
JUNE 1990 DX	
20 GW/TrS	
0715 WORS 105.1 MI Detroit, c, march	255
21 TrS	
0000 1100.1 011 000011 11	253
0621 WKSG 102.7 MO Mt.Clemens, r,	
MOTOR CITY MOTHER, C 101 THE TOTAL	230
0641 WLQR 101.5 OH Toledo, b, ID not taped	313
22 GW	
0653 CFMX 103.1 ON Coubourg, c, j, ID	207
23 TrS	
0619 CHEQ 101.1 ON Smiths Falls, fm, wx, QSL	
recd in 9 days w/ bumer sticker, pens	
key chains, etc from Brian Perkin (PD)	368
0621 WGMR 101.1 PA Tyrone, k, tc, GMR-FM	322
0647 WOMP 100.5 OH Bellaire, WOMP-FM 100	357
0700 WAAL 99.1 NY Binghamton, The Hot FM	
WAAL, American Top 40, ID	355
0734 unID 99.1 New K-99-FM, probe aimed SW	
(Bruce, I'd bet this was WHKO Dayton-gc	1
0801 WFMK 99.1 MI Lansing, Lite Rock , ID	350
COUL WITHIN 55.1 III Delibring, Line 160cm; 12	

of old, best of new. Most wanted on a bet by car radio installer that reception wasnt possible due to locals 97.3, 97.7. Again, amazin' lil' filters! QSL recd one week from DJ Holly Helix 25 Tr/TrS Clear 0630 CBCE 97.5 ON Little Current, tm, CBC regional north weather, nx, wx, ID 331

Bruce Hornsby music

0630 CIGL 97.1 ON Believille, FM97, b, ID

0800 WCIZ 97.5 NY Watertown, r, CIZ, best

24 Tr Overcast, Cool

1540 WDTR 90.9 MI Detroit, t, discussion host Pat Traynor, phone # 494-0964 1601 WMXD 92.3 MI Detrot, Detroit's Mix, ID 255 1859[WJMO] 92.3 OH Cleveland Hts, Jammin 92 Milli Vanilli mx, 3rd catch on 92.3 beside 92.1 50 kw CKPC local less than 2 km away!

91.9 still elusive though 2002 WGLE 90.7 OH Lima, c, FM91, Night Mx 426 2152 WITR 89.7 NY Henrita, Housemartins, ID 185 0634 CKQM 105.1 ON Peterburough, k, sports ID and Country 105

0558 WBNY 91.3 NY Buffalo State C, "This is Buffalos

temperature here in Bluemont, Ohio"

0712 WGMC 90.1 NY Greece, Julie DJ, rj, ID, that

27 Es Finally, I missed Memorial Weekend Skip!

spot, Personal and Station DX record!

Now I'm an official member of the KODA crew! 2024

1347 KILT 100.3 TX Houston, k, QSL in 14 days 2024

1403 KWNS 104.9 TX Winnsboro, wx, QSL 15d 1739

1404 KYCX 104.9 TX Mexia, k, ad for Life Insurance

1428 KMAG 99.1 AR Fort Smith, k, official wx stn

1459 unID 99.1 FL Miami, 99 Jamz (WEDR-gc)

1621 WIKB 99.1 MI Iron River, kr, ID "Clover Co. of

new E-layer cloud formed?

0701 WVCC 101.7 PA Linesville, r, Z-ROCK

previous calls-gc)

finallly caught a legal ID on tape

0700(WCII) 88.7 NY Spencer, g. USA Radio News

(Bruce, this one is on 88.5. Also it never had any

28 TrS (maybe MS?)

JULY 1990 DX

7 TrS

QSL/Media Kit recd 13 days from Del Williams 1490

area weather, KSEK 1340 AM mentioned

Iron River", QSL/bumper sticker 13 dys 748

1432 unID 99.1 KS Pittsburg, r, wx, Y 99.1, Pittsbgh

At times of E skip I wish I had a digital! Going

back to personal favourite 99.1 and sitting on it

should be over 50 catches now 88 to 92 (a personal

log. Still on air Greg? (Yes-gc) 0612 WYTN 91.7 OH Youngstown, g, ID thru

0615 nID 91.5 to 91.9 WCBJ heard "present

0702 WBER 90.5 NY Henretta, p\$, on & off

1343 KODA 99.1 TX Houston, b, ID concert

CKPC 92.1 SPLATTER

goal I made) Time for some E-skip!

only alternative" Only WFBF 89.9 still left to

115

230

170

Bruce's report continues .....

#### NORTHERN FM DX

**IULY 1990 DX** 2353 WNGZ 104.9 NY Montour Falls, r, Wings 105, Fat Bottomed Girls by Queen 2330 WFYC 104.9 MI Alma/St.Louis, Tiger BB, ID 368 2349 WOWE 98.9 MI Vassar, The New 98.9, serving Flint and Saginaw. 276 2353 WIML 98.9 MI Petoskey, r, 99-IML, ID, wx 16 GW Clear skies

0703 CHRY 105.5 ON Toronto, p, t, CRTC obligations last Toronto catch at 50 watts sandwiched between 105.3 CFCA 100 kw @ 35 km, and CHRE 105.7 100 kw @ 80 km. Could the 3 (150) filters have helped? (Maybe, hi-gc)

**BRUCE HALL'S REPORT continues** 17 GW/TrS 0604 CDXK 106.5 ON Owen Sound, r, K106.5, ID 0625 CBCB 98.1 ON Owen Sound, CBC, tm (Bruce, this station's frequency is 98.7-gc) 161 0714 CFLY 98.3 ON Kingston, 98.3 Fly FM, ID "Kingston's Easy Favourites" 0800 CFBK 105.5 ON Huntsville, rm, local ad with WIlliam St. Huntsville address, news, "17 degrees at 8 o'clock, I'm Don..." 265 18 TrS 0627 CKAT 101.9 ON North Bay, k, wx, Anne Murray music. Furthest North heard.

0729 CBEG 90.3 ON Sarnia, tm, CBC ID, regional nx

With Barbara Peacock. ROBERT ROSS VE3JFC - BOX 4373 STN C - LONDON, ONTARIO N5W 512 Equipment: Marante 2226 B receiver, with FM beam

MAY 1990 DX

27 Es

2200 KSTX 89.1 TX San Antonio, Celtic program 2231 KUCV 90.9 NE Lincoln, ID as Nebraska Public Radio Network, into "Pipe Dreams" 2343KMGW 94.5 WY Casper, ph# list of movies in Casper, ez-list and folk music

WPCV 97.5 FL WInter Haven, c/w music ID as 97 WPCV Winter Haven-Lakeland-Orlando 28 Es 0005 WNFI 99.9 FL Palatka, ID by OM as I-100 rock

0011KDLY 97.5 WY Lander, ad for restaurant, c/w, mix with WONE Akron

1915 WT IT 90.1 FL Crestview, Focus on the Family 1927 KBTS 93.3 TX Killeen, ID as B-93, Austin's #1 Hit Music Station, Rock music.

1930KNTU 90.1 TX Denton, jazz music, DJ-Scott phone number 565-FM88

1936KGKL 97.5 TX San Angelo, severe wx watch ID as KGKL 97.5, C&W music 1938KWTX 97.5 TX Waco, Central TX wx, ID

as the Most Music 97 FM, Pop mx 1946KNFM 92.3 TX Midland, ad for Midland 1949KHYI 94.9 TX Arlington, rock mx. contest. 2021 KOFX 96.7 TX Georgetown, 85 in Austin,

96.7 Oldies all the Time 2035KHFI 98.1 TX Austin, K-98.1, local ads 2118KTDR 96.3 TX Del Rio, SS talk by 2, several mentions of Del Rio, ID in English at 2130.

1953KILO 93.9 CO Colorado Springs, Kilo 94 rock Music, Stn #600 logged on FM 2016KRBE 104.1 TX Housotn, Power 104 IDs 2018KZEU 107.9 TX Victoria, c/w mx 108 KZEU

2028KTFM 102.7 TX San Antonio, ads, 102.7 Jams 2035KHLA 99.5 LA Lake Charles, local ads, lottery sport. LA99, rock music

2049KNRI 96.5 TX Houston, Energy 96.5, contest 2114KOXT 101.9 TX San Antonio, KQ102, c&w mx 2116KZEP 104.5 TX San Antonio, ads, another block of hits on 104 KZEP, rock mx

2120KTLC 99.7 TX Tye, flash fool warning, Abilene's KTLC 99.7 2127KODM 97.9 TX Odessa, event sponsored by

channel 9 and KODM 98, contest spot 2134KGEE 99.9 TX Monhanas, KG-100, c/w mx 159KMOC 89.5 TX Wichita Falls, legal ID, relig. 2201 KOCV 91.3 TX Odessak Mountain Stage spot on 91.3 KOCV, public radio, classical wx

1457KLUX 89.5 TX Robstown, ez list music, rlgs talk, Chorpus Christi's AMgo better w/KLUX 1612KYQX 89.5 TX Weatherford, c/w mx, ID as 89.1 KMQX Springtown and KYQX 89.5 FM W'ford 2032W JOY 106.7 FL Ft.Lauderdale, Joy 107, MOR mx 2 Es 2054KMDL 97.3 LA Kaplan, c/w mx, KMDL Kaplan

Lafayette, local ads. 2100KSLU 90.9 LA Hammond, listener supported 2117KIKK 95.7 TX Houston, Kick 96 FM and KIKK

3 Es 1201KBNL 89.9 TX Laredo, SS rige pgm, ID in EE

1254KACV 89.9 TX Amarillo, ID as FM 90 KACV-FM Amarillo's FM90, DJ-Susan

12 Tr 1913WTGV 97.7 MI Sandusky, Tigers/Indians BB ID as WTGV-FM in local ads

2030 WMEE 97.3 IN Fort Wayne, rock and heavy metal, ID as 97.3 WMEE

2150 WUCX 90.1 MI Bay City, classical mx, ID as CMU Public Radio and 90.1 FM \$, legal ID 2152WKYN 97.5 PA St. Marys, 97-KYN, rock music

WESE)104.7 PA Pittsburgh, wx, ez list mx, Esy 104, WESE-FM 104.7, thunder stm warn 2242CFJB 95.7 ON Barrie, ID as Rock 95, ads.

26 Es 2024KELT 94.5 TX Harlingen, local ads, anti-drug campiagn, Valley wx, request line. 2055KTLY 99.7 or 99.9 "Acadiana KTLY" jingle (Robert, I bet this is KTDY 99.9 Lafayette-gc)

2958 WLBF 89.1 AL Montgomery, calls, address, phone numer 271-8900 into open line pgm 2120 WVAS 90.7 AL Montgomery, election talk.

JULY 2 Tr 2247CBON18 88.1 ON Sault Ste Marie, FF talk by OM, 104.3 booming in!! 2258CBSM 89.5 ON Sault Ste Marie, //CBCE 97.5

2306(WMXD) 92.3 MI Detroit, 92.3 the mix, Dance 3 Tr 0725CBCE 97.5 ON Little Current, CBC ID, region wx

2227W JIM 97.5 MI ELansing, Lansings New EZ 97.5

6 Es 2105 WXLT 94.1 MS McComb, lite rock, Sunny FM 8 Es 1503KSMB 94.5 LA Lafayette, dance mx, calls

1553WBHL 91.3 AL Florence, rock music, OM DJ 1621WIIN 98.7 MS Vicksburg, Win 98, contest, wx 1624WYMX 99.1 MS Greenwood, 99.1 WYMX, soul 1636WOOF99.7 AL Dothan, 99.7 Woof FM

Robert's Report continues......

ROBERT ROSS' report continues

July 8 Es cont. 1638 WILN 105.9 FL Panama City, rock, Island 106 1648WTNT 94.9 FL Tallahassee, c/w mx, TNT Country, stations promo

18 Tr 1151[WXKR] 94.5 OH Port Clinton, ex WOSE, ID as Toledo's and NW Ohio's Classic Rock X94.5 WXKR, weather by YL

21 Tr 1417 WEGR 107.5 WV Wheeling, rock, Eagle 107 (Robert, note the new calls-gc) ex:WZMM

22 Tr 1059WCVF 88.9 NY Fredonia, 130 watts!, ID as 88.9 The edge-WCVF", "Grapevine" pgm. a community calednar pgm



POST OFFICE BOX 1400 SAN LUIS OBISPO, CALIFORNIA 93406

WILLIAM R. HEPBURN - 1211-1547 MISSISSAUGA VLY - MISSISSAUGA, ON L5A 3X8

EQUIPMENT: JVC R-X330V Rcvr 12th floor balcons/indoor discone/diPoles.

- time EDT	
JUNE 1990 16 Tr	
	81
2317 WBMW 947.3625 NY East Aurora (STL FM-107.7 Wethersfield	
<u>17 Tr</u>	
0122 WTNY 98.5 NY Watertown	180
0914 WKLX 948.5 NY Rochester	104
(STL FM-98.9)	
26 Tr	
0658 WRVE 91.7 NY Watertown	180
(re: WRVN 91.9 Utica)	
26 Es	
2058 WMBV 91.9 AL Dixons Mills	915
(xmtr Shilo Hill)	
2120 WGIB 91.9 AL Birmingham	790
26 Tr	
2125 WHKO 99.1 OH Dayton-	345
Springfield	
27 Es	
0000 KETR 88.9 TX Commence	1125
0049 unid 99.1 "Max-99"	
"The Delta Giant	. 11
0050 MUF-99.3	
1336 KZFX 107.5 TX Lake Jackson-	1330
Houston	
1847 KRMD 101.1 LA ShrevePort-	1070
Bossier C-Spr	
1354 MUF-115.2	CHARGE S.
1357 KWNS 104.9 TX Winnsboro-	1120

Sulphur Sp-Mineola

			-74	the section of the sections	aller aller feet fact.
				Highld Pk-Ft	
1422	KMAG	99.1	AR	Fort Smith	960
1428	KRPT	103.7	QK	Fort Smith Anadarko	1150
****					
	1990				
4 Tr					
0137	MHK0	99.1	OH	Dayton-	345
				Springfield	
				Pittsburgh	
		98.3	OH	Youngstown	165
4 GW					
				Toronto \$	
	(6)	0 db 1	119	ital Radio Test	t (DAB)
		var ious	: 10	: I AM/FM stns)	
8 Es					
				Oklahoma City	
2149	KWOX	101.1	OK	Woodward	1160
	(10	(db 6			
2159	KVGB	104.3	KS	Great Bend	1065
	(15	db)			
2204	KFDI	101.3	KS	Wichita	1020
2227	KJIL	104.9	OK.	Bethany-Oke Cs	7 .g
2533	KENE	101.1	KS	Oberlin	1110
2244	KDCK	95.5	KS	Dodge City	1135
2259	KMUW	89.1	KS	Wichita	1020
11 G	d				
	CKLH	958.68	375/	958.8125 ON Ha	am 37
	(35	3+ db +	STL	ex-956.8125/9	956.9375)
	(45	50.8625	5	till on)	

1406 KVIL 103.7 TX Dallas-

Comments: Digital radio tests underway here in T.O. Sounds good with both extra bass as well as treble. Overall response sounds more flat and realistic. CJCL-AM aired, quote "the world's first digital sport's broadcast" unquote, with a Blue Jays game. It's still not true digital recePtion since we all still have just analog receivers -- but at least 1/2 of the transmission (i.e.-the transmitter) is in fact digital. Most AMs weren't advertizing the fact that they were doing the test. No wonder! If anybody tuned over to 99.1 and compared it to their AM signal they would wonder why in the world they were listening to AM for music! It's like watching black & white TV, hi. CV. 3/LL

AROUND THE DIALS: In Buffalo WBMW 107.7 Weathersfield has changed format again! They are now "beautiful" music, and WEZQ, EZ 107.7. They are picking up the format vacated by WJYE in late 1988. Big news also in Houston, where 96.5, which was modern rock and dance hits before that, is now KHMX "The New Mix" (96.5). The format is hot a/c or lite top 40... In Central Texas, 94.7 Luling has dropped easy listening for KATG "The Country Cat". 92.1 in 60 tetro Denver is now easy listening....the slogan for WXLT 94.1 MS is reportedly "Sunny 94".

#### MODTHEDN EM DV

1227 WYAK 103.1 SC Surfside Beach

1234 WPCM 101.1 NC Burlington

1236 WCKZ 101.9 NC Gastonia

1230 WJMX 103.3 SC Cheraw-Florence

NORTHERN FM DX	SEPTEMBER 1990
	OMINGTON, MINNESOTA
JUNE 1990 DX	JUNE 27 Es continued.
5 Tr	1240 WTHP 98.3 NC Thomasville
1700 KQSD 91.9 SD Lowry	1248 WKTC 96.9 NC Goldsboro-Wilson
6 Tr	28 Es
0800 KTSB 93.9 IA Sioux Center, g ex94.3	1558 KLUX 89.5 TX Robstown
21 Tr	1559 XHOY 88.1 TX Laredo
0825 KARL 105.1 MN Tracy, testing	1600 XHNOE 91.3 TA Nuevo Laredo
25 Tr	1601 KAJA 97.3 TX San Antonio
2015 KTWB 101.9 SD Sioux Falls, 102 FM	1619 KITY 92.9 TX San Antonio
25 Es	1640 KLTG 96.5 TX Chorpus Christs, K-Lite+MSC/
2022 KAPT 94.7 TX Luling, b	1645 KVMV 96.9 TX McAllen, g
2028 KSTX 89.1 TX San Antonio	1700 KJEF 92.7 TX Jennings
2031 KGNZ 88.1 TX Abilene	1700 KBNJ 91.9 TX Chorpus Christi
2045 KZFM 95.5 TX Chorpus Christi	1702 XHAAA 93.1 TA Reynosa
26 Tr	1705 KYKM 97.7 TX Winfield, b
0800 KNEN 94.7 NE Norfolk, +X SCA	1709 XEEW 97.7 TA Matamoros
0800 KKPR 98.9 NE Kearney,	1711 KDBH 97.7 LA Natchitoches
Elving's Old Stomping Ground	1714 KWVS 97.5 TX Kingsville
26 Es	1716 KIWW 96.1 TX Harlingen (mix of EE/SS)
2000 WFSS 89.1 NC Fayetteville (No TV Es)	1719 KZFM 95.5 TX Chorpus Christi
2001 WNAA 90.1 NC Greensboro	1721 KOYE 94.9 TX Laredo
2019 WOSF? 92.1, like WOSF Oldies?	1723 KHUN 101.7 TX Huntsville, FM 102
2024 WKRR 92.3 NC Ashboro	1725 KYKS 105.1 TX Luftkin
2030 WDLX 93.3 NC Washington	1727 KZFX 107.5 Houston, Z107
2100 WRJA 88.1 SC Sumter	1730 KGLF 103.3 TX Freeport, g, +X SCA
27 Es	1730 KJOJ 106.9 TX Conroe, dual ID w/above
0700 WUWF 88.1 FL Pensacola	1739 KISX 107.3 TX Whitehouse, Kiss 107
0830 WBLX 92.9 AL Mobile	1751 KOUL 103.5 TX Sinton, k, Cool 103 FM
0831 WFLZ 93.3 FL Tampa, +67 khz M	1800 KEPG 100.9 TX Victoraia, EE and SS
0832 WRJH 97.7 MS Brandon, g	1804 KRJT 100.7 TX Bowie, k, COuntry 100
0846 WBLE 100.5 MS Statesville,	1806 KRYS 99.1 TX Chorpus Christi, k
Country 101 (ex 95.9)	1818 KTDR 96.3 TX Del Rio
0900 WMBV 91.9 AL Dixons Mills, g	1827 KJAK 92.7 TX Slaton, not yet on 92.9
0905 WJDR 98.3 MS Prentiss	1957 KOMP 92.3 NV Las Vegas, KOMP-The
0915 WPCS 89.5 FL Pensacola	Rock of Las Vegas
1000 WLBF 89.1 AL Montgomery, g	2000 KXTZ 94.1 NV Henderson, b, was 105 deg.
1002 WBHL 91.3 AL Florence	2000 KAFF 92.9 AR Flagstaff
1030 WBSN 89.1 LA New Orleans	2001 KNPR 89.5 NV Las Vegas
1057 WSOR 90.9 FL Naples	2004 KCEP 88.1 NV Las Vegas
1102 WFSU 91.5 FL Tallahassee	2321 CJAY 92.1 AB Calgary, C-Jay
1109 WJIS 88.1 FL Bradenton, g, Joy	JULY 11 Es
1130 WMFQ 92.9 FL Ocala, b, +M SCA	2030 KGNZ 88.1 TX Abilene
1132 WNFB 94.3 FL Lake City	2041 KYKR 93.3 TX Port Arthur
1139 WLCL 97.7 FL Micapony, Clear 97 FM	DX from cabin at Alborn, Minnesota;
1140 WQHL 98.1 FL Live Oak	JUNE 14 Es
1143 WHFX 103.3 GA Waycross	1427 KFAN 101.1 TX Fredericksburg
1147 WOMX 105.1 FL Orlando, Mix 105.1	1430 KBUB 90.3 TX Brownwood, g, 550 watts
1150 WYAI 104.1 GA LaGrange, k, Y106 & Y104	1434 KMOO 96.7 TX Mineola, Lake Cnty \$
1157 WJYO 107.7 FL Mount Dora	1440 KFMX 94.5 TX Lubbock
1158 WCRJ 107.3 FL Jacksonville	1442 KEBC 94.7 OK Oklahoma City, 94 Country
1200 WDEN 105.3 GA Macon, k	1451 KNFM 92.3 TX Midland
1203 WMTY 103.5 SC Greenwood	1500 KOCV 91.3 TX Odessa
1226 WSOC 103.7 NC Charlotte, k	1515 KNEW 89.5 NM Poratles (ID with KHFM)
100711811111111111111111111111111111111	AFOA MOEY OO 2 TV EL Boso

1521 KOFX 92.3 TX El Paso

0815 KQLX 106.1 ND Lisbon, k

1900 KGRD 105.3 NE Orchard, continued ....

JULY 2 Tropo

NORTHERN FM DX

JULY 2 Tr cont

2030 KCND 90.5 ND Bismarck (Severe wx)

2100 KBRX 102.9 NE O'Neill

2100 KQSD 91.9 SD Lowry

2130 KTSD 91.1 SD Reliance

2148 KIDA 92.7 IA Ida Grove

2200 KIOS 91.5 NE Omaka

2325 KSDN 94.1 SD Aberdeen

2359 KESY 104.5 NE Omaha

3 Tr

1200 WSCN 100.9 MN Duluth, ex 100.9



P.O. BOX 5398, GAINESVILLE, FL 32602.

#### MIKE CHERRY - BOX 631 - GANGES, B.C. CANADA VOS 1EO

(604) 537-5201, EQUIPMENT: see previous VUDs, @ = 1990 Toyota FM stereo radio with stock whip and Realistic #12-1875 10 db booster

JUNE 1990	JULY 5 Es cont.
2 Tr (@-Ganges)	1938 KJLS 103.3 KS CHR\$
1048 KXYQ 105.1 OR	1946 KSOF 91.1 KS calls, Jazz, \$
23 Tr @ Vancouver	1954 KANZ 90.5 KS, jazz,PSA,calls
2030 KMHD 89.1 OR	2002 KHCD 89.5 KS c, calls, \$
2032 KKSN 97.1 OR	2004 KBYU 89.1 UT
Kissin, oldies \$	2012 KCME 88.7 CO, c
2034 KXYQ 105.1 OR \$	2036 muf down to ch 4
2037 KKEE 94.3 WA	2150 KNLB 91.1 AZ rm, \$, calls
2039 KDUX 104.7 WA	8 Es
2042 KTPS 91.7 WA	1910 unID 91.1 \$, see note #1
2045 KKCW 103.3 OR	1914 KCSC 90.1 OK ID, big band
2047 KXL-FM 95.5 OR	1916 KEBC 94.7 OK
2049 KBVMt 88.3 OR	1918 KIMN 107.9 CO
2057 KBOO 90.7 OR \$	9 Tr
JULY 1990	0734 KMBI 107.9 WA
<u>1 Es</u>	0738 KKPL 96.1 WA
2039 KCFR 90.1 CO \$	(over KXXO via TrS)
with PSA and c music	0743 KPBX 91.1 WA
2043 KTPR 91.1 IA, j	Morning Edition
2045 KHIH 94.7 CO,\$,K-High	0748 KGDN 95.9 WA, g
2048 KANZ 90.5 KS // KNZA 91.1	14 Tr @ Vancouver
2054 KHAZ 99.5 KS, k, KZ 99, \$	2012 KLCC 89.7 OR, with ID, talk
5 Es	2014 KPBS 89.9 OR
1836 KCFR 90.1 CO, c	2017 KBOO 90.7 OR \$, ID, urban
1842 KWBI 91.1 CO, \$	2021 KGHO 95.3 WA, relig. pgm
g- cont, music	2024 KKSN 97.1 OR \$
1844 unID 94.5 beam ESE,	2026 KMGE 94.5 OR, rm music, ID \$
rm, and was MONO	2034 KWAX 91.1 OR \$
1854 KKLY 95.1 CO, m\$,ID	2038 KFAE 89.1 WA C
1856 KSTR 96.1 CO \$	2042 KHPE 107.9 OR cont. r music, \$
1907 KPRN 89.5 CO, \$	2047 KZEL 96.1 OR p
1914 KEZU 94.5 KS \$	2053 KKCW103.3 OR, \$
1919 KDCK 95.5 KS \$	2059 KMHD 89.1 OR \$,legal ID, jazz
1922 KSQI 96.1 CO \$	2103 KLYK 105.5 WA
1924 KRXLt 94.5 MO \$	17 Es
with Royals BB	1917 KNTU 88.1 TX ID Jazz
1927 KJJJ 102.1 AZ,m\$, ID	21 TrS
1928 KHUT 102.9 KS, k\$, and localed	2209 KMNT 102.9 WA k music \$
1932 KKRD 107.3 KS, rs\$, funky rap!	
1933 KZXL 107.9 KS, m\$	22 MS
1936 KZSN 102.1 KS, k	0552 KWST 94.5 CA "90's in Brawley
1700 RESH TUZ.T NO, K	Mike's comments on next page

ive found a great spot for tropo whilst mobile in Vancouver, B.C. It is on a bluff jutting out over the ocean and provides a good, long-water based tripath towards west central Oregon and Wash! I tried the EID 35V mast-mount ore-amp that Doug Allen sent as a prize, but after much experimentation have found it works out much better with my VHF-tv array. July 5 Es turned into Kansas night here on both lo-band TV and FM. Note #1: this was one of the only signals in here. ined as "Nebraska Public Radio". Is this the new KTNE Alliance, Neb. on the air already?!?!. According to FCC News they only received their CP and calls last April or May (1990). I can't find any other possibilities for this one and it didn't stay in long enough for a legal ID. Whozziss??....Looking forward to trying the delta-Aquarids late July and Perseids early August for some MS IDs!!! Hope v'all got lotsa E-skip by now.....73's Mike

MIKE CHERRY's comments

#### HARRY J. HAYES - 9 HENRY ST. - WILKES-BARRE, PENNSYLVANIA 18702

Equipment: Superradio Jerrold 9 element in attic JULY 8 Es cont. JUNE 1990 1508 KPLX 99.5 TX Fort Worth, K-Plex 26 Es 1515 KTSU 90.9 TX Houston, The Choice 2005 WIST 94.5 FL Port St.Joe, All Gospel WJST 1543 KITX 95.5 OK Hugo, ID c/w mx 2017 WJIZ 96.3 GA Albany, with Z-96.3 IDs and local ads 1546 KMAG 99.1 AR Fort Smith, c/w mx 2024 WTNT 94.9 FL Tallahassee, TNT Country 1552 KKAJ 95.7 OK Ardmore, c/w, mx 2037 KUEZ 99.3 TX Luftkin, oldies 2050 WYMX 99.1 MS Greenwood, MAX 99, ID, jingle 1605 KEBC 94.7 OK Oklahoma City previously heard as WSWG. 1923 KWKH 94.5 LA Shreveport 2245 WIKZ 95.1 PA Chambersburg, rr, ID thru WZZO 1624 KTFX 103.3 OK Tulsa, wx rpt 2022 WAYV 95.1 NJ Atlantic City, rr JULY 1990 1705 KQUS 97.5 AR Hot Springs 1800 KCBI 90.9 TX Dallas, rr 1027 KHYI 94.9 TX Arlington 6 ES had extensive movie report. 2057 KWEN 95.5 OK Tulsa, K-95 2058 KITO 96.1 OK Vinita ID 2102 KXUS 97.3 MO Springfield 1856 WOVV 95.5 FL Fort Pierce, rr, jx 1417 KSMB 94.5 LA Lafayette, FM 94 1/2 1420 WTYX 94.7 MS Jackson, no call, Oldies 94 1420 WOHT 95.5 MS Jackson, rap music 1421 unID 96.3 soft rr, suspect WSLI

1600 KSOZ 90.5 MO Pt.Lookout, with wx, ID 1610 KAYI 106.9 OK Tulsa, K107, strong thru local sidebands 1616 KLTE 101.9 OK Oklahoma City, o/WAVT, K-Lite 1623 KEYN 103.7 KS Wichita, ID, oldies 1637 KRZZ 96.3 ?? (Harry, it is Derby, Kansas-gc) 1639 KUEZ 99.3 TX Luftkin, playing the EZ favorites 2235 KUTT 99.3 NE Fairbury, c/w, Stereo 99, no calls 2241 WKYE 95.5 PA Johnstown, strong at 200 miles 2257 WDSY 107.9 PA Pittsburgh, c/w, very good at times,260 mi 2309 WAMO 105.9 PA Pittsburgh, jazz program, poor to fair 2309 WSHH 99.7 PA Pittsburgh, v/strong, Wish 100, soft rr 2338 WMXP 100.7 PA New Kensington, Mix-Jams, Pittsburgh;s New Jamming 100.7, strong clobbering WFMZ. 2324 WFRB 105.3 MD Frostburg, c/w, country leader, 250 mi 2346 WAMO 105.9 PA Pittsburgh, Hot 106 2351 WGTY 107.7 PA Gettysburg, Country 108 at 120 mi 0027 WOWK 97.1 PA University Park, 97 Quick, The Rock of Lion Country, hard rr. good at times, @110 miles 0118 WFXX 99.3 PA S.Williamsport, oldies the New Fox, all

other Williamsport locals came up at this time also.

Grand total is 767 stations after 20 years of DXing FM. 7/8 was an all around grandy day with the season's best Ex session and Tropo session both happenig on that day. I was pleased to receiver WQWK 97.1 on 7/22. This is one I never tried for because I never expected to hear them. This shows one should always have faith. I would like to wrap up 97.1 and surrounding channels as much as I can now. Mountaintop PA 97.1 is threatening to come on but not, fourtunately, for about 4 years. The future owner has a lot of loose ends to tie up, including still being tied up with WRBL 102.3 "Rebel Radio" in Pittston. I have a sneaking suspicion he will be on before this. I am also being threatened with Tobyhanna on 107.9, Tunkhannock on 107.7, Olyphany on 95.7, Hawley 105.3, not to mention a 99.5 in Scranton. I think if I see one more authorization for this area I'll screeeem! Alas the FM band was not created for DXers. My opinion for this season is that it was OK but nothing super fantastic. There seems to have been a shortage of Es on FM. I'm keeping my fingers crossed for some prize winning trops this fall.

#### GEORGE B. SHERMAN - 104 PINEWOOD CIRCLE - APPLE VALLEY, MINN 55124

Equipment: McIntosh MR78 tuner, Winegard, CS6065.10 element FM antenna. MAY 1990 DX MAY 28 cont 28 Es 0000-0010 CDT KCMI 96.9 NE Terrytown KMTS 92.7 CO Glenwood Springs KRPN 89.5 CO Grand Junction K--- 92.3 CO Grand Junction "K-Joy" 1959 CILA 107.7 AB Lethbridge, r, LA-107

1421 KYKX 96.1 LA Lake Charles, Kix, o/the 96.3

1430 WMBR 99.7 MS Jackson, Power 99, local ads 1441 WWMS 97.5 MS Oxford, Miss 98

1454 WSOR 90.9 FL Naples, Christian Life Radio

1442 KBIU 103.7 LA Lake Charles, rr

2059 CBRX 100.1 AB Lethbridge, CBC Radio 2103 CIZZ 98.9 AB Red Deer, o, "Zed 99" plus MT,ID,WA,AZ **MAY 29 Es** 1105 KALP 92.7 TX Alpine, k George's late-May skip continues...

#### GEORGE SHERMAN

GEORGE SHERMAN			
MAY 29 Es cont	May 29 Es cont		
1100 KFLQ 91.5 NM Alberquerque, g	2122 KHRN 94.3 TX Hearne, ad,wx, Nice and Easy K94		
1112 KCRS 103.3 TX Midland	2016 KQLD 106.7 LA Pt.Sulphur, Oldies 106.7		
1125 KRFM 96.5 AZ Show Low, r	(George, note the calls are now KQLD-gc)		
1136 KFQX 102.7 TX Merkel, r, Fox 102.7	2051 WZZR 92.7 FL Stuart, Z-93		
1143 KORQ 100.7 TX Abilene, r	2100 WMFQ 92.9 FL Ocala, UPI news		
1144 KTLC 99.7 TX Tye, r	31 Es		
1152 KRKZ 93.5 OK Altus, r	1847 WEEJ 100.1 FL Port Charlotte		
1216 KANW 89.1 NM Alberquerque, ID	1850 WTRS 102.3 FL Dunnellon, k, Proud Country		
1249 KNEV 95.5 NV Reno, ad	1855 WKTK 98.5 FL Crystal River, thru local!!		
1344 KSOP 104.3 UT Salt Lake City	1859 WKGR 98.7 FL Ft.Pierce, r		
1346 KSHA 104.3 CA Redding, b	1857 WQEZ 99.3 FL Fort Myers, Light and Easy 99		
The Music Mountain, State #47	1940 WOOF 99.7 AL Dothan, Woof-FM		
1355 KTAK 93.9 WY Riverton, news	1950 WAGH 98.3 AL Ft.Mitchell, Magic 98.3 (Note calls-go		
1400 KLCI 96.9 ID Nampa, Rock 97, the Capital	2030 WMPR 90.1 MS Jackson, g talk		
Cities best music variety.	2042 KZMZ 96.9 LA Alexandria, r, The Power Station		
1407 KJOT 105.1 ID Boise, J-105, woman DJ	2045 KMDL 97.3 LA Kaplan, k\$		
named Murphy Collins	2052 KNOE 101.9 LA Monroe, \$, TV-8 ad		
1943 WGYL 93.5 FL Vero Beach	2102 KVNE 89.5 TX Tyler, wx, ID, Total Christian Radio,\$		
1947 WQLM 92.7 FL ???, EZL\$	2103 WMAU 88.9 MS Bude, all MS net IDs		

GREG CONIGLIO - 5100 GLENWOOD DR - WILLIAMSVILLE, NY 14221

		TX9100 now modified with 4 150 khz	
IUNE 1990 DX		6 Es cont	HILCH
16 Tr		2101 WTBG t 95.3 TN Brownsville, k\$ o/CHML, me	ent
0901 WWWM 105.5 OH Sylvania, rm	DOE	serving E.Arkansas and ad for "Brownsville Ford	
	285	2106[KOLL] 94.9 AR Pine Bluff, Cool 95, o\$, ex;KZL	
0910 WBTU 93.3 IN Kendallville, k\$, calls	348	2107 WMC 99.7 TN Memphis, r\$, FM100	911
0921 WBNO 100.9 OH Bryan, talk show, then		2112 unID 97.9 "real" easy listening music	911
rm\$, ID with WQCT-AM	313	2115 KMYQ 100.1 LA Bastrop, My Q100, again?!?	1000
0925 WOTL 106.3 OH Ottawa, rp\$, Power 106	304	2116 KCTO 103.1 LA Columbia, Oldies 103, \$	1002
0937 WBYR 98.9 OH Van Wert, The Bear, ro\$	330		1043
0950 WRSW 107.3 IN Warsaw, r\$, call,	382	2120 <u>KTRY</u> 94.3 LA Bastrop, \$, ads 7 Es	1002
1038 WKLL 94.9 NY Frankfort-Utica, o\$, o/CKQT	180		1015
18 TrS WDCX 99.5 off the air-thunderstorm		1534 KBHT 93.5 TX Crockett, ads, Best Hits	1215
logged new <u>CIME-PO</u> as well as WGAR, WJBR, CJBC		1535 KTSR 92.1 TX College Station	1281
nothing IDed from needed WGAY,WGY,W	BAI	1538 KGRI 100.1 TX Henderson, local ads	1148
19 Es		1540 KLAZ 105.9 AR Pine Bluff, call letters	981
1830 WZZR 92.7 FL Stuart, r\$, Z-93	1098	1545 KWTX 97.5 TX Waco, 97 FM	1271
2051 WKIS 99.9 FL Boca Raton, Kiss, k\$, o/CKFM	1152	8 Es	
1902 WXDJ 95.7 FL Homestead, Radio Ritmo, SS\$	1210	1418 WLWI 92.3 AL Montgomery, calls, k	
1906 WHYI 100.7 FL Ft.Lauderdale, Y-100, top 40\$	1168	1423 WABB 97.5 AL Mobile	
1915 WPOW 96.5 FL Miami, crossover o/WCQA		1451(WMXZ) 95.7 LA New Orleans, rm\$, ex:WBYU,	/WQX
finally logged!, Power 96	1190	1456 WMBD?? 94.3	
1919 WZMO 103.9 FL Key Largo, Spanish	1238	1500 KQXY 94.1 TX Beaumont, Y-94	
1920 WWUS 104.7 FL Big Pine Key, local ads	1262	1505 KJOJ 106.9 TX Conroe, g	
1925 WRTO 98.3 FL Goulds, SS\$ o/CFLY		1513 WGSY 100.1 AL Phenix City	
1921 WIRK 107.9 FL W.Palm Beach, k\$, calls	1122	1536 KZMZ 96.9 AL Alexandria, Power 96.9 o/ WG	R-FM!
1924 WRMF 97.9 FL W.Palm Beach, rm\$	1122	1553 unID 98.7 "Magic 98"	
JULY 1990 DX		1556 KXKZ 107.5 LA Ruston	
3 Tr		1600 unID 97.1 "KAMD 97 Country"	
1040 WDXX 101.1 WI Green Bay, top 40, strong signa	1 472	1623 KMAG 99.1 AR Ft.Smith, k\$	
1043 WRVM 102.7 WI Suring, g\$	504	1642 KBBQ 100.9 AR Fort Smith	
1046 WJBD 92.3 MI Ishpheming, k\$	500	1647 KAMO 94.3 AR Rogers, K-Moe 94	
1048 WDOR 93.9 WI Sturgeon Bay, calls, Icl spot	448	2053 KMXR 93.9 TX Chorpus Christi, !! only TX at to	ime.
1052 WMYX 99.1 WI Milwaukee, Mix 99, rm	460	2124 KMZU 101.1 MO Carrolton, calls, k	
1056 WIKB 99.1 MI Iron River, local ads	533	2140 KRZZ 96.3 KS Derby, op\$, call, also prev hrd or	n 95.9
2350 WFRB 105.3 MD Frostburg, k\$, calls	231	2150 KFFX 104.9 KS Emporia, K-Fox 105	
4 Tr		2210 KWKS 94.3 KS Winfield, Class FM	
0030 WSHW 99.7 IN Frankfort, Shine 99, a/c	440	2218 KFKF 94.1 KS Kansas City	
6 Es	110	2028 KZOC 92.9 KS Osage City,k\$, KZ-93, over WBU	JF!!
1104 WCKW 92.3 LA LaPlace, classic rock	1130	9 Tr	28/00
2100 KHBM 93.5 AR Monticello, r\$, legal ID	952	0031 WCBA 98.7 NY Corning, 98.7 CBA-FM o/WLZ	W 10
THE INTERIOR TO SERVICE TO THE MICHIGENO, 19, 108 al ID	932	1	

Many more were heard on July 8th, but report has been shortened to fit this page. Thanks to my brother who helped out with the skip on July 7 and 8 when I was not home. I was in Batavia the 8th and had stuff over Buffalo locals on the car radio!! Report will continue next month, with some skip July 19th, and the Perseid meteor shower being some of the hi-lites. Thanks to Michael and Shirley Wimer for hosting a great convention! I really had a good time at WTFDA Manassas '90; it was nice meeting all of you. Thope I will be able to make it next year as well....Keep an eye out for that fall trop, any day now!!





Submitted by Tom Bryant 249 Todd Preis Or. Nashville, TN 37221

#### WHY YOU CAN'T FIND WARMLEY, SK ON A MAP

NICE NAME..BUT WHERE'S THE TOWN!: Anyone who's been lucky enough to get CFSS-tv (3) in Warmley, SK has likely had a devil of a time figuring out what it was and where it was. It's still not listed in the 1990 Broadcasting Yearbook! Here's the scoop! In November of 1978 it was decided to expand service to the Weyburn/Estevan region. This necessitated changing CKOS-tv to channel 5 and moving the channel 3 transmitter south almost 150 miles to a location about 20 miles west of Carlyle Lake (and 12 miles north of Kisbey, SK). This is the location of Warmley. The channel change in Yorkton averted a short-spacing problem that would have come up had 5 been dropped in at Warmley. Fringe CCI with CKX-tv (5) in Brandon, MB. Up in Yorkton the channel 5 drop-in worked fine since the closest operation on 5 was CKBI-tv in Prince Albert; well beyond the limits of fringe CCI and short-spacing headaches. The re-location of 3 to Warmley was also problem-free.

OK...SO WHAT'S THE DEAL ON WARMLEY? I've never been able to find Warmley on a map. Even the official SK Highway Dept. road map denies the existence of such a place! It doesn't show up on old (mid 30's) CN and CP rail maps. Why? There is no town named Warmley...any more! Apparently there was a community by that name MANY years ago, but few traces of the settlement remain today. Why this ghost town was selected as the city of license for a television transmitter is not known.

THERE'S MORE: At the same time the CFSS-tv call was moved from channel 7 to the new channel 3 (continuing to run CKOS-tv and CBC programming as well as a few locally originated shows); channel 7 switched calls to CIEW-tv and became a semi-satellite of channel 10 from Yorkton airing CTV network Fare along with limited local originations. Until a few years ago these two stations operated from separate transmitter sites... Carlyle Lake (7) and Warmley (3). An ice storm wiped out the channel 7 tower and that operation was moved to the higher terrain of the channel 3 site (near Moose Mountain..highest point in Southeastern Sesketchewan). That move did not necessitate a city-of-license change..thus CFSS (3) and CIEW (7) operate from the same tower yet are licensed to Warmley and Carlyle Lake, respectively. Data supplied to TV Factbook further confuses the issue since CFSS is listed as Estevan-Weyburn-Regina; and CIEW is listed as Estevan-Weyburn. Neither of the correct cities of license appear in Factbook's Saskatechewan listings; however they do show up in the Canadian allocation table in Volume 2.

<u>UPDATE:</u> With it's transmitter located near the geographical center of the continent, CFSS-tv (3) in Warmley is a frequent catch of DXers in most areas of the U.S., as well as Eastern and extreme Western Canada. The evolution of ownership has seen this company develop from locally owned and operated 'Yorkton Television, Ltd.'; to a regional group known as Shamrock Television System, Inc. (along with CKBI-tv and CIPA-tv in Prince Albert, SK). Shamrock, in turn, comes under the umbrella of Toronto-based Baton Broadcasting which also owns CKCK-tv and CFQC-tv in SK; and CJDH-tv and CFTO-tv in Ontario.

CONCLUDING THOUGHTS: I realize this has been a complicated story and I hope you haven't been too confused (or bored) with an overkill of details. It struck me as an interesting subject not only because of all the channel additions and swaps...but because of the city of license that doesn't really exist; Warmley, Saskatchewan!

NEXT MONTH: Share the DX experiences of Bill Eckberg.

## DIGITAL RADIO: "THE SOUTH OF THE FUTURE"

BY J. JOEL ROSENBERG, M.D.

Introduction

For a number of years, broadcasters have been concerned about radio quality differences between AM & FM. Also, FM has had its own problems with multipath, adjacent channel interference, mobile fading and distortion, and few allocations remaining. Consumers have developed increasing expectations for audio quality.

One system for Digital Audio Broadcasting has been developed in Europe.

This summer (1990), a joint effort by the Canadian Association of Broadcasters, the CBC, and Communications Canada (DCC) have been travelling across the country with public demonstrations of Digital Radio (DR).

#### Technical

#### CANADIAN DEMONSTRATIONS OF TERRESTRIAL DIGITAL RADIO BROADCASTING

There is a series of steps whose components result in the digital broadcast.

The source of digital information, at the studio, is quantized at 16 bits.

A sampling rate converter produces a 48 KHz flow (providing the 768 kbit/sec. required for a mono channel).

Next, a Masking-pattern-adapted Universal Sub-band Integrated Coding and Multiplexing (MUSICAM) Encoding System reduces the source bit stream by a factor of six, while maintaing quality. Thus, the 768 rate is reduced to 128. This reduces the bandwidth required for the transmission. (A rate as low as 64 kbits/sec will maintain near CD quality and 192 allows additional signal processing.)

The Coded Orthoginal Frequency Division Multiplex (CODFM) encodes the bit stream prior to transmission to minimize errors and overcome multiplex problems. Sixteen (16) stereo sources are multiplexed on to one 7 MHz transmission channel.

Multipath is overcome by dispersing successive bits in both frequency and time in CODFM encoding. This multiplexing creates 448 overlapping but equally-spaced carriers over the 7 MHz bandwidth. To prevent multiple reflections interfering on any given carrier, a guard band of 16 us is added to the "symbol" period of 64 us. As long as the multipath delay is less than this, the symbols arrive cleanly.

If some areas are completely blocked from the transmitter, "Gap Fillers", low power relay transmitters, are used — with an isolation of at least 20 dB more than the system gain to avoid feedback. These Gap Fillers can operate on the same frequency as the main transmitter because their signal is received like just another reflection and treated normally by the decoder-receiver.

A local oscillator mixes with the COFDM to produce the desired carrier frequency. The DR system can be compatible with any frequency between 100 MHz and 2 GHz. The ERP necessary for each of the 16 potential channels is only 100 watts (10 watt transmitter with antenna gain of 10).

The Toronto transmission used a 1 kw UHF transmitter, modified to use only the power stages. Then, on through a cavity filter, along the 1 5/8 inch foam heliax transmission line to the 2-Bay vertically polarized antenna.

#### The Demonstration

Public demonstrations of DR took place in Ottawa during early June, in Toronto July 5 to 15, Montreal July 31 to August 8, and in Vancouver in late August.

In Toronto, it was set up in a mid-town office and also a mobile demo in a specially equipped van. The latter contained an AM-FM receiver with speaker and headphone systems plus decoding equipment. The "bus" would take groups of 12 - 14 listeners on a driving tour of downtown Toronto.

The music sources were routed through CBC Studio H, sent by fibre-optic cable to the CN Tower where Rogers Cable set up the transmitting equipment. The Communications Canada Research Centre also had a test van for feeding the fixed site and for mobile field strength testing.

Listeners had a variety of music to compare DR to conventional broadcasts.

#### DIGITAL RADIO

Six hour sets of a variety of Toronto AM & FM stations were rebroadcast on 99.1 MHz (This frequency is the only currently available in Toronto thanks to the demise of CKO in Nov/89). Transmitter power was 1 kw. with a gain of 3 from the CN Tower antenna, for a 3 kw. ERP.

On Friday July 6, I first discovered CKEY-AM 590 on 99.1 while scanning the band during a skip opening. (A couple of years back, they had unsuccessfully attempted a freq. switch with CKO and now I thought they had pulled off a coup with the CRIC!)

The bus passengers even had the choice to select any piece of music from the CBC studio. On one occasion, I heard a Strauss Waltz cut into a CJEZ-97.3 rebroad. Comments received by engineers were that many passengers believed that there was a CD player hidden aboard the bus, the DR signal was so clean.

The DR signal in Toronto was broadcast at 798 + 3.5 MHz (over channels 68 & 69) with a 1 kw. transmitter, directed north up Yonge Street, with bisects the city, resulting a tear-drop shaped coverage area. At only 10 watts, with antenna gain of 10, the signal produced was clean and consistant; but, it quits at 8 dB carrier to noise ratio. I spoke to one of the engineers involved in the experiment, who told me he drove north up Yonge St. with a decoding system. He abruptly, within a few hundred yards, lost the perfect signal in Newmarket, approximately 30 miles (48 kilometers, for you metric fans) north of the CN Tower.

One evening, during an opening of lake tropo, looking for WSYT-68 Syracuse, 180 miles away, I noticed some "interference". A couple of days later, when I found out about this experiment, I learned that this was the DR signal. The screen had a whitish background, with about 30 horizontal lines having a slight moving or fading appearance, I took some photos off both Ch. 68 & 69, and, if they turn out well, I will send them to "Photo News" to publish in a future VUD.

Due to the experimental nature of the test, the broadcast signals on ch. 68-9 and FM 99.1 were not assigned call letters, according to the engineer.

Upon completion of this demonstration in Vancouver, the equipment will be returned to France.

#### The Future

An international meeting, the World Administrative Radio Conference, sponsored by the International Telecommunications Union, will be taking place in Spain in 1992. There will be a group lobbying for a frequency allocation for DR that can be delivered by broadcast stations and by satellite. Therefore, the purpose of these demonstrations has been to create public demand for DR. If it is accepted, it is hoped that DR will be in place in 1994 or 95.

The broadcasters expect a phase in period of 10 years, coexisting with conventional radio until the latter is phased out. The increasing demand for DR will be expected to greatly lower the cost of the appropriate consumer audio products.

What does this mean for us DXers? Many questions come to mind. Will the UHF band be cut into further for DR assignments? Will AM-FM DXing come to an end? Will DR DXing be possible or will receivers be market selective?

We'll have to wait and see!

To quote Toronto radio commentator Dick Smythe in his Toronto Sun newspaper column of July 10, 1990, "And sadly, no longer will we experience the nighttime romance of distant stations calling across the purple sky."

#### Postscript

I hope that I have summarized the DR material which was made available to the public, in an accurate and understandable manner. If I have made any errors, feel free to contact me!

73's,

And lets keep DXing while we still can!

J. Joel Rosenberg, M.D. 19 Glenayr Rd. Richmond Hill, Ontario L4B 2W3 H: (416) 884-8454 B: 469-1149

Toel

## SPECIAL REPORT

THE FM BAND FROM THE TOP OF WHITEFACE MOUNTAIN IN NORTHERN NEW YORK STATE'S ADIRONDACKS -- WHERE "NORMAL" CONDITIONS SOUND LIKE A MAJOR TROPO OPENING!!!

#### PETER Q. GEORGE - 24 COLUMBIA ST. APT 1-F, BROCKTON, MASSACHUSETS 02401

LOCATION: Whiteface Mountain, New York (4683' ASL), Lake Placid, New York TIME: August 9, 1989, 1500-1700 EDT

\$ = stereo

88.1 CBEE ON Chatham

88.7 WRVT VT \$ Rutland 89.1 French UnID (CKRL Quebec?-gc) 89.5 WSLU NY \$ Canton 89.9 WRVO NY \$ Oswego 90.3 CKUT PQ \$ Montreal 90.5 WSLL NY \$ Saranac Lake 90.9 WSLO NY \$ Maione 91.7 CBMB PQ Sherbrooke 91.9 CBF9 PQ Mont-Laurier 92.1 CJDM PQ \$ Drummondville 92.5 CFQR PQ \$ Montreal 92.9 WEZF VT \$ Burlington 93.1 CKCU ON \$ Ottawa 93.3 French unID (Quebec City?-93.5 CBM-FM PQ \$ Montreal 93.9 CFMO ON \$ Ottawa

94.3 CKMF PQ \$ Montreal

94.9 WHOM NH \$ Mt. Wash -ington 95.3 WXXX VT \$ So.Burlington 95.5 CBOC ON Cornwall 95.9 CJFM PQ \$ Montreal 96.3 CFMK ON \$ Kingston 96.5 WCMF NY \$ Rochester 96.9 CKOI PQ \$ Verdun 97.1 WRUT VT \$ Rutland 97.7 CHOM PQ \$ Montreal 98.1 CBON ON Sudbury 98.3 CFLY ON \$ Kingston 98.5 CIEL PQ \$ Longueil 98.9 WQCR VT \$ Burlington 99.3 WSNN NY \$ Potsdam 99.5 CIME PQ \$ Ste.Adele 99.9 WGFB NY \$ Plattsburgh 100.3 WHEB NH \$ Portsmouth 100.7 CBF PQ \$ Montreal 101.1 CBF10 PQ \$ Sherbrooke 101.7 WDGE NY \$ Saranac

102.1 CBOF7 ON Brockville 102.3 WLFE VT \$ St. Albans 102.5 CBOF ON \$ Ottawa 102.7 CITE1 PQ \$ Sherbrooke 103.1 CFMF PQ \$ Fermont 103.3 CBO ON \$ Ottawa 103.7 CHXL ON \$ Brockville 104.1 CKTF PQ \$ Gatineau 104.5 CFLG ON \$ Cornwall 104.9 CBBA ON Brockville \$ (They're on?-gc) 105.3 CKBY ON \$ Ottawa 105.5 WLPW NY \$ Lake Placid 105.7 CFGL PQ \$ Laval 106.1 CHEZ ON \$ Ottawa 106.5 CFEI PQ \$ St. Hyacinthe 106.7 WIZN VT \$ Vergennes 106.9 CKO1 ON \$ Ottawa 107.3 CITE PQ \$ Montreal 107.5 CBCK ON Kingston 107.7 WGNA NY \$ Albany 107.9 WVPS VT \$ Burlington

I took a journey to the Lake Placid region of the Adirondacks. Whiteface Mountain (4683' ASL) just happens to be located in that area. In addition to the brilliant Meteor Scatter I was able to hear, I was able to drive to the top of the mountain and take in some of the best high altitude DXing I have ever been able to hear in some time. Just take a look at my bandscan. All you need is a good quality car receiver...

LAYOUT: GREG CONIGLIO

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## STATION BREAK

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

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

FOR SALE - M Street Journal Radio Directory, first edition, about 9 months old, for sale at half price: \$15 post paid. A complete listing of US and Canadian AM and FM stations with full station addresses and phone numbers. Stations are listed by state, call letters, frequency, and ratings market, along with some radio history and other goodies. An excellent second reference and companion to FM Atlas, a must for QSLers. Please send money order to: Radio Guide Book, 154 Old Post Road North, Croton-on-Hudson, NY 10520-1932.

WANTED TO BUY - I am looking for copies of the following publications listed below:
BROADCASTING & TELEVISION YEARBOOKS 1954-1951
Central Virginia, Atlanta, & So. Georgia editions of TV GUIDE 1953-61
Recent 1990 Large Radio Market Editions of STANDARD RATE & DATA WEEKLY STATION BOOKS.
I will pay up to \$50 for any large quantities of above publications.
David Shapiro - 484 Hammond Drive - Griffin GA 30223

FOR SALE - BROADCASTING YEARBOOK 1988 for sale, \$8 plus \$4 shipping. Also Standard Rate and Date Services Spot Radio: 1) Sept. 1, 1983, \$2 plus \$4 shipping. You will get first choice on SRDS if both unsold; if not, you will get the other book. No refunds unless both books are sold. SRDS has radio station addresses and maps, some program format and facilities' information. TV Factbook Services volume (no station addresses), 1977 \$1 plus \$4 shipping. Canadians add \$7 to the shipping charges.

Bruce F. Elving - Box 336 - Esko MN 55733-0336

FOR TV TAPES COLLECTORS - Members who would like to collect TV tapes from all over the world, as well as those interested in educational tapes, should look into video-club of the University St. Maria, all our services are without charge. Send us a tape, Beta or VHS (in NTSC) recorded with youth, music and entertainment shows from Australia, Canada, USA and Europe. We'll send back your tape recorded with material according to your choice. Please write to: Luis Gonzalez A. - Casilla 2483 - Arequipa, PERU - SOUTH AMERICA

FOR SALE - Satellite specials from Rich! Houston Tracker VIII plus I.R.D. w/UHF remote control \$1350 + \$10.00 UPS; Houston Tracker V I.R.D. w/UHF remote \$1200.00 + \$10.00 UPS, electronics packages, feedhorns also available for above units; Low noise amps: C band 45-55 degree 62 dB gain, \$100.00 + \$5.00 UPS, Ku band 1.4-1.6 dB & 62 dB gain \$190.00 + \$5.00 UPS; Actuator arms: 18" HTS \$129.00 + \$5.00 UPS, 24" Yon Wiese \$179.00 + \$5.00 UPS; 24" Saginaw \$200.00 + \$5.00 UPS; Ribbon wire - sweep tested to 1500 MHz: (per foot) \$1.00 + ???; Dishes: Orbitron 8.5' mesh, 5 yr. warranty \$310.00 + \$50.00 UPS, Orbitron 10.5' #c-10, 2 yr. warranty \$360.00 + \$50.00 UPS, We offer discounts on complete packages!!..ALSO we have a good line of used equipment, both high band block and 70 MHz from Uniden / STS / Drake / Prostar / Channel Master / & more. (Evenings best if phoning) Rich Wertman - 6150 Crosby Rd. - Lockport NY 14094 (716) 433-0805

WTFDAers: YOUR ad can appear in the VUD free of charge! Got a piece of DX gear you'd like to sell? Looking for something? Advertise in STATION BREAK. This feature appears on a space available basis. WTFDA and the VHF-UHF DIGEST assume no responsibility for any claims made by advertisers—our trust is implicit, as fellow DXers.

### **FEEDBACK**

MEMBER COMMENTS ON SPELLING AND COLUMN TYPE STYLES IN THE V.U.D....IS THE BULLETIN HARD TO READ?

I want to complain about too many different type styles in the V.U.D. I realize that all editors are volunteers each with with different models of printer or typewriter so I guess that means that no two columns are going to look exactly the same, but. the print in many of the columns is MUCH too small, and is not consistent from column to column, sometimes from page to page! Does this make the book easier to read? Wrong. It makes it HARDER to read. I know there are other DX clubs and bulletins...do all of them look like this?

An example: NORTHERN FM -- full of good stuff and with many interesting items but why does the type style change with every other page? FCC FM and TV NEWS really cram info onto the pages, this makes them sometimes hard to follow. You can get used to it after a while, but I see other things that drive me nuts, like ITALICS in the QSL/LOGO column that are not needed (Italics are unreadable when they are very small.).

And please realize that computer-style "dot matrix" type belongs on utility company bills -- it is too "impersonal" in a monthly magazine. I enjoy all the editors' dedicated efforts and I appreciate they are amateurs, so don't get me wrong, I'm not out to "knock" them. VUD apparently has standard abbreviations, so why not a standard typestyle for the columns, if such is possible? If I'm going to send in a report I want it to be readable, and if I did a column I would make sure EVERYONE could read it!

-- Robert Twomey, Amsterdam NY

Why is basic spelling important in the VUD? There are at least two reasons:

- A reader of a sample issue (and a potential club member) might think that if the column editors spell or write like that, this must truly be a club of illiterates that he or she wouldn't want to join.
- A column contributor might become annoyed that his name is misspelled or his (or her) intelligent comments are butchered by the editor, and might not contribute anymore.

The solution? Simple:

- 1. PLURALS NEVER TAKE APOSTROPHES.
- Using "150s" as an example muddies the waters because many people use an apostrophe in this situation even though it's usually considered incorrect. This dispute, however, is not an excuse to use apostrophes everywhere.
- 2. THE WORD "ITS" NEVER (NEVER!) TAKES AN APOSTROPHE EXCEPT WHEN IT'S A CONTRACTION FOR "IT IS."
- That's because "its" is already a possesive like "his" or "her" and does not need an apostrophe like "Bill's" or "Debra's." Also, there is no such word as "its'"!
- 3. MOST CLUB MEMBERS PREFER THAT THEIR NAMES APPEAR CORRECTLY IN THE  ${\sf VUD}$ .
- Examples: Keith (not Kieth) Pugh, Eric (not Ed) Fader, Matt Sittel (not Sittle), and Bill Burrow's (or Burrows') house (not Bill Burrow's house). Try checking the signature or return address to see how the contributor spells his own name.
- IF YOU'RE NOT SURE HOW TO SPELL DIFFICULT (OR SIMPLE) WORDS, BUY (AND USE) A DICTIONARY.
- It will cost you about \$3.95 and will probably help your personal correspondence, too.

FOLLOWING THESE SIMPLE RULES WILL MAKE FOR A BETTER-LOOKING VUD AND, MAYBE, A HEALTHIER CLUB!

-- Eric Fader, New York NY

# WELCOME TO KNOXVILLE







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On Saturday morning, browse among the exhibits, it's your chance to see firsthand some of the hottest equipment and products in the industry and meet the professionals who make the radio business tick. Or join members of the International Radio Club of America ((RCA), a top-rated broadcast band (AM) club, as they hold their annual convention, as they hold their annual convention.

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Later, choose from some of the dozens of workshops, seminars and talks being presented by some of the biggest names in radio. Build an antenna. Find out how to hear exotic shortwave stations like a pro. Attend a hands-on scanner modification workshop. Learn about the excitement of military communications. For beginner or expert, from

one end of the radio spectrum to the other, it's all here.

Make plans to attend. Registration is a very affordable \$30.00. Space may be limited. So reserve your place today by sending your check or money order to Monitoring Times Convention, P.O. Box 98, Brasstown, NC 28902. (No credit cards, please.) Special discounts on airfare are available from Delta, the official airline of the 1990 Monitoring Times convention, and Holiday Inn. (Rooms will be \$50.00 a night; \$30.00 a night if you share with another person.) Do not include money for accomodations at this time. You will receive additional information along with your confirmation letter. Sign up now and assure yourself a place at the radio event of the year,

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