ANUARY 1977 Ninth Anniversary Issue

oublishers' notes...

WTFDA HEADQUARTERS, P.O. BOX 163, DEERFIELD, IL 60015 USA

IT'S BEEN NINE YEARS...since that fateful day in late 1967 when WMRC, a floundering all-band club with only 27 members, was transformed by the hand of Morrie Goldman into an organization which exceeded most everyone's expectations: WTFDA. We're pleased to be able to glance back at those years from a vantage point which now shows WTFDA as a rapidly-growing club (as illustrated by that "slanted" statement on our front cover this month) and in better financial condition than ever before. We haven't yet exceeded our club's all-time membership record (roughly 330), but we're making headway: the January count is expected to be very near, if not exceeding, 310 members, and will be our sixth consecutive monthly increase. Although many have claimed that the present staff is largely responsible for WTFDA's vitality, thanks on this occasion most rightfully go to Morrie and Gary Olson, who founded and steered this club through difficult times when it might have just as easily folded. Morrie and Gary have our thanks, and they're deserving of yours as well.

NEW ADDRESS...A reminder that WTFDA Headquarters is now located at P.O. Box 202, Whiting, IN 46394. We expect to have a new masthead for this page, reflecting the new address, next month. The Illinois address shown above will remain open, but mail received there will be delayed considerably.

NEW CLUB POLICY...Beginning with this issue, WTFDA is instituting a new statute which declares that there shall be at least ten percent technical content in each VUD. Our thanks to Don Erickson for providing Xerox copies of past material, which makes this rule possible.

BITS...Pete Oprisko's EFM update and Dave Janowiak's new series will both appear next month...You'll find our new membership list in the center of this issue...Plans for our Tenth Anniversary Issue are now in the works. If you like this VUD...just wait until January 1978!

73, Clarke Ingram for Pete Oprisko, John Zondlo, and Mike Hogan

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TFDA MAILBOX

John Zondlo 6617 Maryland Hammond, IN 46323 (219) 844-8694 Deadline: 15th

New Members: John Callarman Peter Campbell

Mark Gregor John M. Jefferson Tom Little Paul L. Malone Deane P. McIntyre Joe Perge Lexington Smith

1122 Maple (FF-1060) 54 Hookton Ave. 1150 Tilson Drive 536 Cambridge Park N. 321 Retford Ave. 67 Centre St. 546 Oakwood Ave. 55 E. End Ave., Apt. 4G New York, NY 10028

Mt. Vernon, IL 62864 Ship's Office, USS Lang FPO San Francisco, CA 96601

> Uniontown, PA 15401 Concord, CA 94520 Maumee, OH Cranford, NJ 07016 Bowmanville, ON LlC 2Y2 Newark, OH 43055

Renewals:

Robert Babut, Robert E. Baxter, Mike Brewer, Alan Hobson, W.T. Ryan, Roger Sabella, David Wurl.

Address Changes: B.W. Battin-4305 Pitt St.-Duluth, MN 55804 Doug Everitt-1710 W. Maine-Enid, OK 73701 Gary Olson-1195 S. Wilson Drive-Lake Forest, IL 60045 Terry Robinson-c/o Post Office-Woodend, Victoria, Australia 3442

Most DXers need no introduction to new member JOHN CALLARMAN. News director at WMIX in Mt. Vernon, John is the editor of NRC's Domestic Log, the finest station guide around for BCB DXers. He is also a former publisher of NRC's bulletin, DX News, and a member of IRCA. Good to have you aboard, John!

PETER CAMPBELL is a 25 year old Navy man who also belongs to IRCA. He found out about WTFDA thru the Association of North American Radio Clubs.

Primarily interested in FM DXing, JOHN M. JEFFERSON is the proud owner of a Heathkit AJ-15 tuner and a Winegard SC-650 antenna with a rotor.

Antenna height is now 15', and will soon be 35'.

From the state of New Jersey (just below the state of confusion, hi-jz) comes new member PAUL L. MALONE. His DX gear includes a Bearcat 101, a Realistic Pro-3, and an Allied A-2515.

A 19 year old college student, DEANE P. McINTYRE is also interested in BCB and SW DXing. His shack features an Admiral 19" TV set, a Heathkit GR-78 receiver, and high gain, rotatable VHF/UHF antennas. He found out about WTFDA thru Radio Netherland's DX Jukebox.

Also a member of NRC and NASWA, JOE PERGE is interested in FM-TV, BCB, and SW DXing. A visit to his shack will produce an AR-1500 receiver, a

Philco TV, and a Jerrold antenna.

It's always nice to hear comments like those of LEXINGTON SMITH. After receiving a sample copy of the July VUD, he joined the club, saying we had a "great publication and organization". Lexington is a writer, and also belongs to NNRC, DSWCI, NASWA, and ASWLC. For FM DXing he uses a Dynaco FM-3 tuner with a Dyna amplifier.

Tidbits.....

Here's something from WTFDA Comptroller Gary Olson, who recently moved to Lake Forest, Illinois: "We found a bigger place with all the extras we were looking for. So, although I didn't get much further away from the Chicago locals, the other advantages are obvious. Naturally I took down my tower and antennas. At the new place I may go to a "ground up" tower, thus I could be enticed to sell my roof mount aluminum tower and steel base plate assembly (which is 5 years old but in great shape) for a reasonable price. Any DXer who might be interested should drop me a line. The 24 foot tower breaks into three sections, but I expect they will be difficult to separate, so anyone wanting to take the tower will need something to transport the full 24 foot length. Also available is a used CMA-U amp with power supply and a virtually new (factory re-aligned after 3 months use) CMA U-B with power supply."

Next we have some comments from Harvey Woodworth (142 Otsego Ave .- San Francisco, CA 94112) that space was not available for last time: "My steps WTFDA Mailbox January 1977

toward amateur slow scan TV get more interesting as time goes on! I will be getting more information in the near future, and that will put me closer to that endeavor! The key to the project is in the communications receiver, as it is an audio signal that goes through a scan conversion process, which orients that audio signal to video. It's quite an interesting process, and it gets more exciting each day! I'll be looking into the future project of a communications receiver first, since this will be the key to the entire project. A new "DX den" also is planned for the future, as this too is an important matter. This will be done as part of my home remodeling program, so here again the slow scan hobby will have a suitable environment in which to function. Being home for a 3 week vacation has enabled me to take care of several important matters, including the slow scan hobby endeavor." And this comes to us from Harvey in a more recent letter: "During my recent 3 weeks vacation, I received some very encouraging news in regards to amateur slow scan TV! These next few months will find me quite busy, particularly in the first phases of that endeavor, and will keep you informed as to progress."

Member Dave Martin has a new publication out: "I have been a member of the club for the last few years, being active mostly in FM DX'ing. However, over the last few months I haven't had much time for DX'ing. I have been spending my time writing a book all about purchasing hi-fi equipment. I believe it would be of interest to many DX'ers who have not taken the plunge into a stereo system yet and soon plan to do so. The book is written so that it could be understood by someone totally unfamiliar with technical terms, but it goes beyond the beginning stages into more advanced material. The assumption I'm writing under is that a person first has to understand his needs before he can even look at a stereo system. I haven't seen any other books written from this point of view. I'm selling the book only by mail. It's about 73 pages, and it goes for \$2.95. The title is: "The Stereo Tailor". My mailing address for the book is: P.O. Box 19052, Lansing, MI

A8901. Checks and money orders are payable to Dave Martin."

New member John Callarman writes to introduce himself: "As one who has been a DX'er of sorts since 1947, I'm interested in all phases of the hobby, and have been thinking of getting involved in TV+FM DX. I did a little TV DX out in the Panhandle of Texas in the early '60's and managed to QSL some 30 stations coast-to-coast, including a number of Canadians, in a three month period- but the situation hasn't been conducive to further high-band work since. About that time, I took on a column for the NRC, then moved to Boston and published the bulletin for a year or so, got married, the wife hiked out the club, and I've just in the past couple of years begun to become active. My first project (I always have a project) was to research and prepare the fourth edition of the NRC Domestic Log, now available. Now I've got a little more time! I have been news director here at WMIX for the past six years. I've worked at radio stations in Oregon, Texas, Louisiana and Massachusetts before moving here. In addition to my NRC membership, I'm also

in IRCA and NASWA, and am "petitioning" to rejoin NNRC."

From the land down under we have comments from Terry Robinson: "Am moving into a house in a quiet country town in this state (Victoria) so DX possibilities should be good. Unfortunately my house is nearly at the foot of Mt. Macedon (with a marvelous view) so it looks like I'll have to go to the top of the mountain for the best DX, hi. Already have large aerial and am hoping to get a rotator soon (at the moment they are as scarce as hen's teeth, but a local Australian agent has some waiting to be cleared by customs)."

In the History of WTFDA, published in the July 1976 VUD, it was erroneously reported in paragraph 4 that Ferdinand Dombrowski was inspired to change the club's name and format from WMRC. Actually, it was Morrie Goldman who

inspired the change. My apologies to MSG.

The Japanese Association of DXers has issued it's JADX VHF Report 1976. It's based on a VHF survey done by JADX members during the May-September Es season. It also includes features on Chinese and North Korean FM stations, Korean TV stations, and characteristics of 1976 VHF DX propagation. The report is available for 2 IRC's surface mail, 3 IRC's airmail, by writing to Japanese Association of DXers, P.O. Box 1766, Tokyo Central, 100-91, Japan. Incidentally, it is in English.

Many thanks to ANARC for their recent plugs of WTFDA in the ANARC Newsletter. In the December edition, they mentioned our "explosive growth pattern", which has propelled the club to a membership of over 300. You can see how many members we now have by checking the membership list enclosed

with this VUD.
See y'all next month......

. .jz



FE NEWS AND DATA

Dave Pomeroy KTWU--Channel 11 Signal Hill Topeka, Kansas 66604

January 1977

K11NO N. Pinewood Springs, CO

K66AV Sunetha, CO

KØ2IG Rodeo, NM

K69BI Madras, OR

KØ4IV Paulina, OR

KBTV

KREZ

KOLD

KATU

KVAL

(Thanks to John Combs, Frank Aden, Doug Everett, James Thomas and Morrie Goldman, dp)

	TV Applications				Tranclat	tors Granted (contin	اله میں
	Concord, CA	(42) 280k	w 2815.8	ΔΔΤ	K1ØKE	Plain, WA	iuea)
	Greenville, MS	(15) 2746k			K82AR		- +1 60
	Mt. Vernon, IL	(13) 316k				Durango, CO chang	e to ch. 68
	Medford, OR	(21) 77.7k			K61A0		
					KØ3EQ	Douglas Creek, CO	KREX
	Ft. Wayne, IN	(55) 499k	w 782.9	AAT:	KØ9NA	Sheep Springs, NM	now ch. 11
	001 0				KØ2IH	Tohatchi, NM	now ch. 9
	CP's Granted				K130K	Silver Springs, NV	KTVN
	*Austin, TX	(18) 2032ki	w 1150.0	AAT	W59AE	Pine Grove, PA	WVIA
					WØ8BQ	Del Rio, TN	WLOS
	New Stations on the	Air			KØ70H	Baker, NV	KUED
	KTSF-26 San Franc	cisco, CA			KØ9NB	Baker, NV	KUTV
-	*KQEC-32 San France	cisco. CA			KIINP	Baker, NV	KTVX
	*KTEJ-19 Jonesboro				K130J	Baker, NV	KSL
	*KAFT-13 Fayettev				KØ8IW	Captain's Bay, AK	KJL
	*KETG-9 Arkadelph				K81BI		
	*KUSU-12 Logan, UT					Alamosa, CO	WDAW
	WATL-36 Atlanta,				KØ5GC	Rexford, MT	KPAX
					KØ9NC	Cottonwood Cove,NV	
	WGTQ-29 Traverse	City, MI			KIINQ	Cottonwood Cove,NV	KTVK
-	6-17 1 11 0 1				K130L	Cottonwood Cove,NV	
	Call Letter Grants				K65AF	Chagrin Falls, OH	WVIZ
	*KLTS Shrevepor				K67AI	Gates Mills, OH	WVIZ
	WVII-TV Bangor, M		WEMT		W28AA	Cookeville, TN	WCPT
	*WWPB Hagerstow		WWPB-TV		W57AQ	Alton, UT	KUED
	KOLR-TV Springfie	eld, MO now	KOLR		KØ701	Granger, WY	KSL
					KØ6IN	Granger, WY	KCPX
	Call Letter Applicat	cions			KØ3ER	Riverton, WY	KOA
	KTVG Fayettevi		W KGTO-TV	(36)	KØ70D	Sourdough Pipeline	
	KGMV Maui, HI		W KGME-TV	,	KØ9MX	Atascadaro, CA now	
					KØ410	Coffee Creek, CA	KHSL
					KØ5FZ	Coffee Creek, CA	KRCR
	Translators Granted				K66AT	Mancos, CO	KREZ
	K1ØKD Prudhoe Bay	. AK			K56AS	Wainae Coast, HI	KHON
	KØ70E Camp Lonely				K58AN		
	W31AA Newark, OH		SU-34		K6ØAE	Wainae Coast, HI	KITV
	KØ9MZ Monument, O		30-34		K66AU	Wainae Coast, HI	KHET
	W64AP Williams, A		ET		K68AY	Wainae Coast, HI	KIKU
	KØ4AO Dolores, CO		s KØ5GA			Wainae Coast, HI	KGMB
	K56AT Gore Pass,		BTV		KØ8IU	East Glacier, MT	CJOC
					KØ70C	Polaris, MT	KXIF
			s K130H		KØ9MY	Polaris, MT	KTVM
	KØ4IP Searchlight		s ch. 12		K61F0	Norfolk, NE now K	
	KØ70F Searchlight		s ch. 6		W56AP	Genoa, NY	WCNY
	W57AF Johnson Cit	y, NI			W69AN	Union Springs, NY	WCNY
	W62AI Harpursvill	e, NY					
	W67AC Owego, NY				HE READE		
	W69AG Berkshire,	NY		Spani	sh langu	age KORO-TV in Corpu	us Christi,
	W57BW Sanpete Cou	nty, UI		TX p1	ans to g	o on the air in Febr	ruary
	Klinn Barrow, AK			KUAM-	TV in Gua	am has returned to t	the air fol-
	KØ4IU Kaktovok, A			lowin	g "a two	month typhoon-cause	ed hiatus
	KØ4IS Nuiqsut, AK			KVD0-	3 is not	a satellite of KOAF	as is
	KØ4IQ Point Hope,	AK		KOAC.	KTVR-1	3 in LaGrande is now	a part of
	KØ4IR Wainwright,	AK		the 0	regon Edi	ucational Broadcasti	ng System
	KØ70G Cotopax, CO		DO	of fo	ur statio	onsAccording to F	rank Aden
	KØ3EP Cotopax, CO		TV	Orego	n channe	1 21 will be in Bend	I not in
	KØ3EO N. Pinewood					rs will be Medford,	
	KØ8IV N. Pinewood					I-6 will switch from	
	Klino N Pinewood					first of April	

CBS around the first of April...Demise of

WSWB-35 in Orlando involved the confiscation

of RCA equipment by U.S. marshals who pulled

the plug in the middle of a program...WSCT-

27 in Tallahassee is ABC affiliated.

Bruce F. Elving, Editor 18 1/2 E. Fifth St., Duluth MN 55805

New FM Stations Granted

CA Mariposa 96.3 1100 h,v; 2080' km; 48,113 km CA Pacific Grove 104.9 740 h.v; 550' 15, 45 (replaces KOCN, deleted)

CA San Pedro KKOP-FM1 93.5\$ r 10 [KKOP-FM 93.5 Redondo Beach CA on-channel booster]

CT Wallingford *89.9 10 watts: Choate Hall CO Fort Collins K244AF 96.7\$ c KVOD 99.5 Denver

10-watt translator. [ment) CO Glenwood Springs KCMK *90.5 10 (reinstate-/ LA Many 107.1 3000 (horizontal); 300' 15.46 mi

LA Sulphur 100.9 3000 h,v; 300' 15, 46 miles MI Ironwood 106.9\$ mk 25000 h.v; 515' 29.67 mi

MO Liberty 106.5 100000 h.v; 620' 39. 83 mi; k MO Tarkio 93.5 3000 h,v; 235' kr; 13, 42 miles NE Omaha 96.1 100000 h, 98000 v; 275' 29, 73 mi

primary & secondary. Interim operation! NJ Blackwood *91.5 10 watts

NM Aztec 94.9 30000 h,v; 430'; 45, 108 kilometers NM Deming 94.3 3000 h,v; 195' 12, 40 miles

OH Dayton *88.5 10 Wright State U.: perilously close on the dial to Dayton-Kettering OH sharetimers on *88.7; how can it happen?

OK Ardmore 92.1 3000 h,v; 210' m; 13, 41 miles OK Weatherford 97.3 69000 h,v; 380'; 51, 117 km PA Mt. Pocono W272AA 102.3\$ [WGBI-FM 101.3

Scranton PA translator C: 1 watt: Stereo. r. SC Surfside Beach (33-34-32; 79-2-29) 3000 h. v; 300'; 24, 74 kilometers; k.

UT Roosevelt *90.9 10 watts

VT Montpelier 96.7 400 h,v; 700'14, 43 milesnow is FM authorized in all state capitals.

WI Neenah 100.1 3000 h,v; 162' 11, 38 mi; q WY La Barge K296AT 107.1\$, m (KSL-FM 100.3 Salt Lake City UT translator). Not sure if 1 or 10w.

On Air and DX Ready (Presumed) AL Birmingham WBHM *90.3 25000 h,v; 740'; \$,SCA AK Kenai KQOK 100.1 3000 h,v; 194' (Calls, too)

AZ Willcox KWCX 98.3 3000 h,v; 57' CO Montrose KUBC-FM 94.1 31000 h.v; 1750'

FL Marathon WMUM 94.3 3000 h,v; 107'

FL Pensacola WAJB 107.3 100000 h,v; 367';\$,m,

FL Tallahassee WAMF *90.5 10

GA Chatsworth WQMT 99.3 3000 h,v; 300'

IL Decatur WDZQ 95.1 50000 h,v; 500' \$, k IL Morton WTAZ 102.3 3000 h,v; 300', p, NBC

IN Chesterton WDSO *89.1 10, r (claims 84' ht.)

MS Columbus WLNK *90.9 10

NE Seward KSRD 96.9 100000 h,v; 580' \$; SCA

NY Cortland WSUC"-FM" *90.7 10

PA York WVYC *88.1 10

TX Amarillo KQIZ-FM 93.1 71100 h.v; 161' UT Cedar City KSUB-FM 92.5 41000 h,v; 1690'

On Air with Changes (Selected) AL Decatur WRSA 96.9 100000 h,v; 830'

CA Paso Robles KPRA 92.5 17000 h,v; 762', having moved from 94.3. CA St. Helena KVYN 99.3 3000 h,v; 235' m; good signal reported in San Francisco on car FM sets.

CO Pueblo KTSC"-FM" *89.5 9800 h,v; 165'

FL Pensacola WJLQ 100.7 100000 h,v; 500'

MD Baltimore WPOC"-FM" 93.1 16000 h.v: 860' MA New Bedford WMYS 98.1 50000 h.v: 500' [97.7)

MI Dowagiac WDOW-FM 92.1 3000 h,v; 108'(from /

NM-Albuquerque KRKE-FM 94.1 3500 h,v; 154'

[Thanks to all who sent Holiday greetings; A Happy and DX-filled 1977 to all of you!!!]

OH Cincinnati WVXU"-FM" *91.7 6400 (h); 680' [PA Pittsburgh WPEZ 94.5 34000 h,v OH Cleveland WBOE *90.3 50000 h,v; 500'; \$? TN Greeneville WOFM 94.9 100000 h,v; 320' Deletions

CA Pacific Grove KOCN 104.9 PA Norristown WVVE *91.7

Off and On Frequency (Drifter) WI Ashland WATW-FM has returned to its correct TX Tyler KTYL 93.1 100000 h.v; 470' frequency-95.9, after being on 96.1 for a long time, and wandering as far down as 95.5. VA Chesapeake WFOS *90.5 1500 h,v;

On with reduced power?

WI Suring WRVM 102.7 should be 100 kw, but I doubt they are more than 3 kw. KRIT 96.9 Clarion IA fined for running less than 90% of their authorized power. Anybody notice ifWI West Bend WBKV-FM 92.5 19000 h.v: KRIT is now stronger than they were for a while?

Facilities' Changes Granted

AL Birmingham WVOK-FM 99.5 870' (100000 h. 50000 v; p (not r); \$, SCA. AL Muscle Shoals WLAY-FM 105.5 3000 h.v (300' CA Bakersfield KUZZ-FM 107.9 5500 h,v (1340') CA Los Gatos KRVE"-FM" 95.3 370 h.v (870') CA San Francisco KKHI-FM 95.7 8600 h,v; 1200' CA San Luis Obispo KUNA 96.1 5600 h,v; 1410' CA Thousand Oaks KNJO 92.7 560 h,v (DA); 630' CO Denver 106.7 KAZY (from KLZ-FM) (One reporter sent an item that a 10-watter on *90.3 was granted to CA Lutheran College in FL Starke 106.3 WPXE-FM 1000 Oaks, but I believe the FCC threw out the GA Glennville 106.3 WKIG-FM application, and Broadcasting was in error.) | L Chicago 95.5 WMET (WDHF) CA Truckee KSML 101.7 1250 h,v; 470' 15, 46 mill Chillicothe 94.3 WCLL CO Oak Creek KFMU 103.9 265 h,v (1030') 15,

Duluthian. CT Waterbury WWYS 92.5 12500 h.v DA: 860' FL Winter Park WPRK *91.5 1300 h,v; 90' GA Eastman WUFF-FM 92.1 2000 h,v; 370' IL Kankakee WBYG 99.9 10,000 h,v; 230' 17,51m A Ruston 107.5 KXKZ (KRUS-FM)

IL Springfield WDBR 103.7 19000 h,v (320') IL Taylorville WEEE 92.7 780 h.v; 290' 10.37miM! Grayling 100.1 WQON

IN Crawfordsville WLFQ 103.9 920 h,v; 500'

LA Lake Charles KLCL-FM 99.5 33000 (h); 400' LA Thibodaux KXOR 106.3 1800 h,v; 380' MD Bethesda WJMD 94.7 21000 h,v (780')

MI Bad Axe WLEW-FM 92.1 3000 h,v; 235'

MI Coldwater WANG 98.5 500' (50000 h) MI Fremont WSHN-FM 100.1 2750 h,v; 295'

MI Kalamazoo WQLR 106.5 33000 h,v; 600' MN Eveleth WVLA 100.1 710 h,v; 550' 14, 44 mi PA Clarion "91.7 WCUC"-FM"

MO Maryville KNIM-FM from 95.3 to 99.3; FCC says they must move by Feb. 1, 1977, or face

deletion! Move is necessary to give Red Oak IATX Paris 99.3 KACW (KPLT-FM) its first channel-95.3.

NE Nebraska City KNCY-FM 97.7 300' (3000 h.v) WA Yakima 104.1 KUEZ (KUTI-FM) NH Newport WCNL-FM 101.7 2750 (h); +51'

NC Concord WPEG 97.9 20000 h,v (390')

OH Centerville WCWT *91.9 (not *89.5), 10 w. OH Cincinnati WVXU (see top of this column)

OH Columbus WBNS-FM 97.1 26000 h,v; 660'; 33, OH Georgetown WURD 97.7 1600 h,v; 390' OR Eugene KRVM *91.9 1900 h,v (28'); 4, 16 mi.

OR Portland KPAM-FM 97.1 100000 h.v; 1000' KJIB 99.5 100000 h,v (870')

PA Charleroi WWFM 98.3 300' (3000 h.v) PA Philadelphia WWDB 96.5 18000 h,v (850')

WDAS-FM 105.3 3300 h,v; 870'

PA Scranton WEZX 107.1 110 h,v;1270' PA State College WQWK 96.7 250 h,v; 920'. TX Dallas KKDA-FM 104.5 680' (100000 h,v); \$ resumed? TX Fort Worth KESS 93.9 adds v. TX Orange KIOF 106.1 1060' (100kw h,v) TX Uvalde KYUF from 95.3 to 104.9 145'; 8 miles primary; 33 second'y. WA Ocean Shores KDUX (studios Aberdeen WA) 31000 h, 21000v; 360' WV Rainelle 96.7 1150 h.v: 460' 530'; 28, 66; quits use of DA. WY Sheridan KROE-FM 94.9 58000 h,v PR Carolina WOLA 107.7 50000 h.v; 89' (but FCC may be in error as it could be -89'; previous ht. was -88') Call Letters Assigned AZ Scottsdale 100.7 KDOT"-FM" (was

KDOT-FM; AM adjunct has new calls) CO Boulder *88.5 KGNU CO Cortez 106.3 K292AX (not K292AD)

CT Norwalk 95.9 WLYQ (WNLK-FM)

IL Winnebago 95.3 WYFE"-FM" (WYFE-FM) 46 mi; windmill powered station owned by ex- | A Fort Madison 101.7 KBKB-FM(KXGIFM)

KS Hillsboro *88.1 KHHS KY Greensburg 103.1 WGRK-FM KY Jackson 97.7 WJSN"-FM"

KY Madisonville *89.9 WSOF"-FM"

MD Lexington Park 97.7 WMDM MO Columbia 96.7 KTGC (KTGR-FM)

MO Poplar Bluff 95.5 KMMX MO Springfield 107.1 K296Al (apparent change from K296AS)

NM Roswell 97.1 KRSY-FM ND Mayville 101.7 KMAV-FM

OR Gold Beach 107.1 K296AS (apparent change from K296AT)

SD Rapid City 100.3 KGGG"-FM" TN Nashville 103.3 WKDF (WKDA-FM)

IWA Spokane *90.3 KWRS

WV Weston 102.3 WSSN (WHAW-FM) PQ Sherbrooke 102.7 CITE (CHLT-FM)

Sudbury ON 92.7 has new calls; see Canada column for details! 71 SCA (67 kHz) Activities

AL Gadsden WQEN drops SCA (103.7) CA Buena Park KBPK *90.1 adds SCA GA La Grange WWCG 104.1 drops SCA GA Manchester WFDR-FM 93.3 "

KY Murray WAAW 103.7 adds SCA MN Rochester KNXR 97.5 adds SCA

MS Columbus WJWF 103.1 Muzak

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MS Hattiesburg WHER 103.7 Muzak TX Arlington KWJS 94.9 music TX Dallas KERA-FM *90.1 talking book, nites KAFM 92.5 talk (Continental News Relay) KNUS 98.7 no SCA; drop listing KMEZ 100.3 " KDTX 102.9 music KVIL-FM 103.7 no SCA KOAX 105.3 no SCA TX Fort Worth KWX1 97.1 talk and music KFWD 102.1 no SCA **\$tereo Stations** AL Birmingham WENN-FM 107.7 and Z (from B) AL Fayette WVEL 98.1 and k, but off the air: has applied for new call letters. AL Jasper WWWB-FM 102.5, and k (from m) AL York WSLY 99.3, m GA Washington WLOV-FM 100.1; r (was kg) HI Waipahu KULA 92.3 PA Scranton WVMW IL Geneseo WRSQ 104.9 *91.5 IN Logansport WSAL-FM 102.3, m (from mr) NY Lake Ronkonkoma WSHR *91.9 103.1 WY Torrington PA Waynesburg TX Houston KUHF *88.7 198.3; adds SCA Quitting \$tereo AL Birmingham WDJC 93.7; had \$ on for one day, but signal very bad; no \$ heard since. WA Richland KORD-FM 102.7 m (from mr)

Formats/Networks AL Birmingham WQEZ 96.5 Mutual AL Carrollton WAQT 94.1 mr (from mk) CA San Francisco KNAI 99.1 to be m, NBC; expected to quit NIS by Jan. 1, 1977, or shortly thereafter; true \$ to resume. DC Washington WAMU *88.5 pc (non-1D: *88+*) FL Clearwater WOKF 95.7 r ("adult contemporary"); A (was 1) FL Melbourne WTAI-FM 107.1 r (from m) GA Athens WAGQ 104.7 r (not p) IL Chicago WNIS 101.1 to rp, \$, NBC to replace NIS; watch for new call letters; also new calls at KNAI, WNWS New York. IN Anderson WLHN 97.9 m (from rm) IN Kokomo WKMO 92.7 (but still on 93.5; 1 reporter says this change, as well as Hartford City's frequency change, not to be consummated; however, others and my FCC data dispute this contention) r (was k); misidentifies as "Z-93." OK Oklahoma City KAFG 102.7 A A=ABC-FM PA Wilkes-Barre WRKC *88.5 | I=ABC Info WCLH *90.7 M M=Mutual WYZZ 92.9 M (from A) TX Dallas KVTT *91.7 g (frcm r)

Dual-City Identifications FL Naples WCVU 94.5 adds Fort Myers FL PA Scranton WGBI-FM 101.3 adds Wilkes-Barre PA VA Big Stone Gap WLSD-FM 93.5 adds Appalachia VA Non-IDers (selected) PA Philadelphia WUSL 98.9 "U. S. 1" and "FM 99"; gives legal calls only on the PA Harrisburg WSFM 99.3 "W-99" PA Greencastle WKSL 94.3 "usually" IDs as "Castle" radio; m.

Changes in Drake-Chenalt automated format services: "Solid Gold" now known as "Contempo 200" (r). "Hit Parade" now "Contempo 300" (rm), although some stations still have "Hit Parade" jingles. New Drake Chenalt formats: "XT 40" (top 40; r); "XT 100" (album rock) [r]. Abbreviations Used (Selected) Program formats: c classical, g gospel, k country, m middle of the road, p progressive rock, r rock oldies and top hits (including "adult rock"), s sool, t talk. One reporter suggested I use a separate symbol for "disco," such as "d." For such stations an "rs" is employed.

READERS' REPORTS AND COMMENTS

While looking for a good radio to hook an SCA adapter to, I have run across a most unpromising prospect, but one that works amazingly well-a Wards Airline model No. GEN-1463A; EIA 742, Series S1611, a six-band portable, AC-battery-IC, that was made in Taiwan some six years ago.. The Wards clerk I spoke to had no knowledge of this radio, saying they change their models every year or so, and that the radio would not be available in the catalog, either. What endears me to this set is the excellent suppression of local FM signals in strong-signal areas. It works much better than other sets that claim to have field-effect transistors, and it has a "multiplex output" jack, as well as an audio input jack, so that you can play an SCA adapter (or FM stereo adapter) through such a set. Its tone quality is good, for a set costing about \$35. Its drawback is its rather poor selectivity, but what I like is its very good sensitivity, freedom from local station overload, the fact that it is small and compact without a cumbersome cassette feature built in, and it has jacks for MPX output and audio in, instead of a simple jack marked "earphone," such as most portables have. I wonder if anybody knows if this radio is still being made and distributed under a different name? It might possibly go down in history like the legendary Sony ST5130 as a very good set, but one that is no longer available.

Some Pennsylvania FM stations are announcing the wrong powers. WYZZ 92.9 Wilkes-Barre PA is claiming 50,000 watts, instead of their true power of 7,500 watts, while WPEL-FM 96.5 Montrose PA at its 10 p. m. local time sign-off, the station says it uses "circular polarization" and a "combined effective radiated power of 114,000 watts." The FCC has ruled that adding the horizontal and vertical effective radiated powers is a no-no, and stations like WPEL-FM can claim only their true effective radiated power, which in the case of WPEL-FM is 57,000 watts. "The section of your book on Non-ID'ers is interesting. Knowledge of the slogan is especially helpful in identifying a hard to receive station. I came across one instance with WMRV Endicott NY (105.7), which often uses the slogan, 'Stereo 105', in lieu of call letters. However the call letters are announced more than once an hour," so the station is not a true "non-IDer." Here are some slogans that are sometimes used alone, and at other times with call letters. Even though the following are not really "non-IDers," knowledge of the slogans used may be of help to DXers in identifying the stations: Scranton WEZX 107. 1 "stereo 107," "FM 107," WWDL 104.9 "Popular 104," "Stereo Island," and "FM 104," WGBI-FM 101.3 "Stereo 101"; Binghamton NY WAAL 99.1 "Stereo 99," and "The Whale," WQYT 98.1 "Stereo 98," and "Quiet Island"; Wilkes-Barre WYZZ 92.9 "Whiz," and "Stereo 93." WUSL 98.9 Philadelphia still m, but more up-tempo at night with live announcers.

A Pennsylvania reporter sent literature on the McKay Dymek AM tuner, plus some personal observations, which helps to add some light on the AM-FM controversy generated by this column. The Jan.. 1975 Audio quotes George McKay as saying "The AM transmitting equipment in use today can send out a signal that is flat 50 to 15,000 cycles. The transmitted signal is clean, distortion free, and full fidelity, except for the case of some few small local stations." Farther on in the same article, however, he

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says". . . in theory at least, clear-channel stations are not limited in station frequency response, though in practice they are limited by complaints. A typical frequency response of an average station can be and most generally is as high as 7,500 Hz, with clear-channel stations going up to 10 kHz." Here are Vic Melis' comments: I purchased both units (George McKay's AM5 [earlier AM3] AM tuner and DA5 AM antenna/preamp) in March while still living in Pottstown plagued by downtown reception problems on both FM and AM. A log periodic with rotor solved FM long ago, but for AM I was looking for the impossible—a tuner/antenna arrangement that would give me the control of directionality and approach the frequency response of FM. Lack of space restricted construction of any antenna. . . Frequency response in the wideband mode far outperforms anything I've ever heard on AM/FM receivers which usually compromise by sacrificing some selectivity in favor of a slightly wider bandpass. Listening through KLH 33 and AR 2ax speakers, I was really quite impressed with the tuner's frequency response. Best results, like AM stereo, are realized within primary signal area where upper sidebands are strong enough to yield a high frequency response with high signal to noise ratio. Recently, over the Thanksgiving holiday, we took along the AM5 and DA5 with us to Michigan while visiting long-time DXer and WTFDA member Dave Martin who does an air shift at WJIM 1240 kHz Lansing. We taped a few hours of his show with the AM5 at a distance of 4 miles from WJIM's transmitter tower. Listening back to the 7½ ips tape through 3-way speaker systems we were able to hear things previously thought to be audible on the station's studio monitor only. Most noticeable was a hum from a poorly-insulated phono cartridge on one of the station's turntables. Another comparison showed a considerable difference in frequency characteristics between the Electro-Voice mike Dave was using and an AKG mike used during the newscast from another studio. Surface noise, pops and scratches, turntable rumble all were quite noticeable during low passages. An A-B check of WVIC (730 kHz) and WVIC-FM (94.9 mHz), East Lansing, showed remarkable AM fidelity beyond 10,000 Hz as an audible difference was noted when switching the Dynaco PAT-4 preamp's 10 kHz filter in and out. . . Signal to noise ratio (at this distance of 5 mi. from the transmitter) seemed no worse on AM than on FM. Although FM had a 2 to 3 kHz advantage at the upper end of audio range (12 kHz vs. 15 kHz), AM at least equalled FM performance at the low end.

Here in Spring City RD#1, there is only one local AM (Pottstown), but 8 of Philadelphia's 11 are listenable in wide-band mode with no adjacent frequency interference at 35 miles from the transmitters, and five of New York's 50 kw-ers from 100 miles, plus another 15 stations from smaller markets in a 60-mile radius. All of these 28 stations exhibit considerably higher fidelity when compared to other tuners with narrower passbands. I agree with the Portland OR person (10-76 VUD) that AM is capable of transmitting the entire audio frequency spectrum; its greatest limitation, however, being the rapid deterioration of signal/noise ratio with distance from transmitter. I think the idea is marketable, though, even with this restriction, since a 20-mile radius would be the target audience, anyway. McKay's tuner and RCA's "Ampliphase" high-fidelity broadcast transmitters are steps in the right direction, but public demand, as always, will be the ultimate criterion. I don't foresee any more immediate success for AM high fidelity than AM stereo or FM Quad has had. Improvements in TV audio would sooner become reality since the technical means are

Concerning WCAO-FM 102.7, it is still called that. This is a Plough station with a "cr" format. It has rock from midnight to 8 am 7 days a week; classical otherwise. Since Plough is changing its other FM's (with the exception of WJJD-FM Chicago), it is hard to tell what will be happening at WCAO-FM. They may have trouble changing from a classical format as WCAO-FM is the only classical FM left in Baltimore. Several controversial programs that were purged from WGTB have found a home on the new

WPFW *89.3 Washington DC.

One reporter who likes to keep tabs on the FM-SCA scene, notes with dismay: "The use of SCA for background music must be declining, because in the last three years five stations in this area have discontinued it. I believe what is happening is that the smaller companies are being bought out by the larger ones (i.e., Muzak), and this leaves less choice for those of us with SCA adapters."

WFLM 103.9 Crown Point IN now p all night; 10 p. m. to 5:30 a. m.; m at other times. WBST in Muncie expects to move to 92.1 by March, although I have yet to see that they have received an FCC CP to make this change, despite reports I have received, including some IN newspaper articles. WSIV-FM 95.3 Pekin IL subscribes to the FM-100 program service, so I wonder if somebody could see if it is \$.

The long history of commercial classical music broadcasting in the Twin Cities is recounted in an article in the Minneapolis Tribune, Nov. 28, "Why Won't Twin Cities Support Concert-Music Radio?" which went into detail concerning the reasons KTWN 107.9 Anoka MN quit carrying classical music,

"Although the Atlas has indicated KGOY 104.9 Bethany OK to be \$ for some time, they only recently actually did go \$," reports an OK reader. "New KAEZ 107.7 Oklahoma City has irregular operating hours; good signal, but still mono." Names of contributors to this column to be run next month!

In a very complicated deal, KEAR 97.3 San Francisco is buying the equipment of KMPX 106.9, and would change frequencies. This would leave KCBS-FM 98.9 free to move to KEAR's 97.3 channel, with 98.9 to be sold to a black-owned group. This station would play r, as opposed to a music. Lost would be KMPX's "big band" sound, and listeners' opposition to this shuffle is forming. KEAR would receive \$2 million to make this change, while paying only \$1 million for KMPX, resulting in a better signal for KCBS-FM on 97.3. KEAR is "grandfathered" in at a higher power than is legal for stations in that area.

A complete list of Canadian stations is said to be available from the Canadian Department of Communications, Broadcast Engineering and Certification Branch, Journal North Bullding, 300 Slater Street, Ottawa, Ont. K1A OC8. It has been reported through Canadian military channels that CHAR 105.9 Alert, NWT, at the northern tip of Ellesmere Island, is being received by service personnel in Thule, Greenland, who have very good receiving equipment. Not bad for a 76-watt station! Also, CHAR is reportedly being heard across the Arctic Ocean in Siberia. Closer to the border, the North Bay, Ontario, stations on 95.1 (French) and 96.1 (English) are basically low-fi outlets that receive all their programs over the CBC AM network line. Their only "i.d." is heard about once every two hours, and all it says is "North Bay 96.1," as well as mentioning the frequency of one of the area's low power AM relay transmitters. Even though the FM transmitters have 100 kw each, their call letters are never heard—even at sign-off.

OUTHERN TV-D

John F. Combs 816 W. Harvard Orlando FL 32804. (305)843-4829

Deadline: 10th For TV-DXers South of the Mason-Dixon line and East of the Mississippi

Well, here we go! Finally, a TV-DX column just for all us "rebels", hi! To begin my first column, allow me to clarify a few things:

(1) "East of the Mississippi" will include all of Louisiana,

which is split in two by the Mississippi.

(2) All TV-DXers in this area are encouraged to report regardless of how "exciting" they may think their DX to be.

(3) FM DXers are encouraged to inform me of the MUFs they observe during Es openings. (This will be helpful for the Es

charts). Even if you never DX TV, at least send me the FM MUFs! (4) Since the type on this typewriter is rather large, I am using one letter abbreviations for propagations, in order to be able to fit 3 columns on a page. E=E-skip, T=Tropo, M=Meteor Scatter, A=Aurora.

To start off this inaugural column, we have a rather dated report from Tom Yingling. Then we'll get to some more recent DX.

Tom Yingling, Jr., 221 Pinewood Rd., Baltimore MD 21222 (EDT) Equipment: Sony Trintron KV-1214 12-in. color set Ranger-505, by Bradford (sold by W.T.Grant) 5-in. B&W set Lafayette 36-element log periodic for ch. 2-13 & FM 5 foot dish for UHF

Jun																		
11	E	2300	CJBR-3	PQ	750	119	T	0220	WFSB-3	CT	270	28	E	2200	KPLO-6	SD	1200)
			KMTV-3	NE	1000			0230	WNAC-7	MA	350				KDLO-3		1150	
		2330	KOTA-3	SD	1350				WCBS-2		200				KXJB-4			
13	E	1400	CJBR-3	PQ	750				WTEN-10						Valley			all
		1430	CBHT-3	NS	850				Albany					2250	KTVY-4	OK	1150)
	T	2330	WTEV-6	RI	350	1	E	0548	CJOX1-			542			Oklahom	a C	tv	
		2350	WFSB-3	CT	270	. 7		No.	Grand]	Bank		29	E	0200	KNOP-2)
16	E	1730	CJBR-3	PQ	750			0600	CJOX-3		1275				North P			
		1750	WRBL-3	GA	650	21	M		KPRC-2		1250			0205	CBWFT-3)
			WABG-6	MS	900	- Ar			Houston		7	- 6			KQTV-2			
			WCBI-4	MS	925		E	1800	KLNE-3	NE	1200				St. Jos			
			WEAR-3	AL	850	25		1810	KMTV-3	NE	1100			0230	KTEW-2		1010)
		1825	TVN-3 C	UBA	1000	1		1830	KGLO-3	IA	1010	1.2			KDFW-4		1200	
		1830	WSAV-3	GA					KTVI-2	MO	730				Dallas			
	+:	1840	-		900	27	E		"FM up	to 1	107.7			0245	KCKT-2	KS	1100)
		4 2 3 2	Carleto					cl	18. 3-6	unre	ead-	10			Great B			
			KOTV-6	OK				able'							(New mo	des	0.20	
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19	T		WVEC-13		180				Fargo (lined,	Tom-	-	
		0215	WTNH-8	CT	250			2115	KWAB-6					4	jfc)			
		5 100		41		Sig			Hayes C	ente	r							

I forgot to note that also July	o on June 28, Tom noted an	FM MUF of 107.7—jfc
15 E 1820 CJOX-3 NF 1275	15 E 2000 WABI-5 ME 550	16 T 2200 WVIR-29 VA 10
1830 CJOX1-2 NF 1850 CJON-6 NF 1275	Bangor 2020 CBHT-3 NS 850	24 E 1130 WPBT-2 FL 1000
1900 <u>CJCH-5</u> NS 850	2030 KTBS-3 LA 1050	1145 WEDU-3 FL 950
Halifax 1930 CJCN=4 NF 1270	16 E 1800 KTVY-4 OK 1010	26 E 1630 KDAL-3 MN
Grand Falls	T 2100 WCVW-57 VA 167	1730 KARD-3 KS 1100
	2100 WCVE-23 VA 167	

August

16 E 1630 WCIX-6 FL 1000 16 E 1700 KARD-3 KS 1010 16 E 1730 KTVY-4 OK 1000 1645 KHAS-5 NE 1100 1715 KYTV-3 MO 950 1800 WDSU-6 LA 1100 1800 WDSU-6 LA 1100

"I'm in the process of increasing my five-foot dish height and adding the Winegard AC-4990 uhf amp to it no matter what Cooper says about it. (And the BT model CMA-Ub or CMA-ULN...cost too much \$\$\$.) Also adding a Channel-Master Probe-9 FM yagi for my Pioneer TX-9100. 73s...Tom." (I agree concerning the AC-4900, Tom. Regardless of what Cooper has to say about it, I still consider it a darn good amp and a good buy, too--jfc.)

SOUTHERN TV-DX January 1977

Tropo conditions over the Southern reporting area were less than fantastic in October, November and early December. South Carolina made it into Florida on UHF a few times, but still none of the strong Gulf or coastal openings that one would expect. E-Skip has been surprising though, with several strong off-season openings. October 4 & 5 saw two very welcome back-to-back openings, one bringing Central America to the Gulf area. And November 24 seemed to have been a good day throughout the South, with the MUF hitting the FM educational band.

Randall B. Clark, Rt. 5 Dutch Ridge, Parkersburg WV 26101 (EST)

November		Bertham Marketter and Analysis
15 E 2002 unID-2 "French"	24 E 1534 ch.2 Cuba	24 E 1732 WBRZ-2 LA
16 T 1000 WKZT-23 KY T	1538 "2 Cubans CCI w/	1732 WESH-2 FL
17 E 1900 KMID-2 TX	each other"	1800 KPRC-2 TX
24 E 1450 WPBT-2 FL	1600-1645 "Network	+ unIDs to 1930
1450 WEDU-3 FL		25 E 1756 KMID-2 TX
1535 KMID-2 TX	Ch. 3 (see below)	30 E 1605 WPBT-2 FL
December		
1 T 2320 WTTV-4 IN	5 T 2230 WHIO-7 OH	6 T 0016 WICD-15 IL
2 E 1215 unID-2	2230 WMAL-7 DC	0016 CKGN1-22 ON T
5 T 0355 WXYZ-7 MI	2230 WXYZ-7 MI	0120 WJZ-13 MD T
	2230 WKBW-7 NY T	

"Well, let's hope that our column is very successful and big...but knowing how the VUD size is, I guess that it's not possible for the column to be any bigger than 4 or maybe 5 pages...(that depends on the number of reports—jfc)...let's hope that you shall as I do get that ever so elusive station!!—73s & the best of DX..."

(Randy--please include distances with your report. Regarding your "Network Trouble" slide, I had the same thing in on the 24th. In my log it is down as tentative CKVR, but that appears to be a little short for skip from your QTH. Probably a midwest PBS, maybe KINE.--jfc)

(Randy also sent along an interesting article about tiny magnetic bits from industrial pollution which are bombarding the Gulf area. None, however, were measured to be more than 800 micrometers in diameter (which ain't a heck of a lot), so there has probably not been any VHF scatter as a result of these—jfc)

Ken Simon, 528 Pilgrim Rd., West Palm Beach FL 33405 (EDT/EST)

```
October
 2 T 0745 W69AA
                              5 E 2000 YNTC-2 NIC 2005 X###-3 Mex.
                                                         17 ? 1300 unID-2 "diag. CCI
 3 T 0840 W69AA
                   FL
                                                               o/WPBT to west"
                                        "ad for XEZ-600"19 T 2100 WCJB-20 FL
     1508 W64AD rebr.
      ICR-6 (WCIX off)
                                  2035 XEW-2
                                               DF
                                                         31 T 0655 W69AA
 4 E 1715 XHP-3
                   PUE
                          T
                             8 T 0425 WCIV-4 SC
     1830 WIPM-3
                             16 T 0630 W64AD rebr.
                   PR
                                                         Also several relogs of
      1950 KFDX-3
                    TX
                                        WDBO-6
                                                         WJKS-17 FL (285 mi.) during
 5 E 1950 YSR-2
                   ES
                                  0800 WCJB-20 FL
                                                         month.
November
 6 T 1755 WJCL-22 GA 390 11 T 1758 WECA-27 FL 360 24 E 1715 CKVR-3 ON 1240
 7 ? 1540 unID-2 "Ø off-
                                       Tallahassee
                                                                "MUF to 91.1 mHz"
      set o/WTHS to SE"
                            20 T 0730 W69AA
                                                         27 T 0600 W64AD rebr.
                                                FL
10 T 1640 WCJB-20 FL
                            24 E 1430 WTWO-2 IN 1020
                                                                    WDBO-6
     2048 WEBA-14 SC 460
2140 WJCL-22 FL 390
                                  1430 WAVE-3 IN 880 28 ? 1300 unID-2 "20 kHz 1710 KYTV-3 MO 1080 CCI o/WPBT"
Also many relogs again of WJKS-17 FL during November.
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"Not much DX, almost had a Costa Rican, but...have become a beer can collector. I joined the Beer Can Collectors of America and take this oppurtunity to ask WTFDAers to send me their empty NON-NATIONAL beer cans (i.e. no Busch, Schlitz, Miller, etc.). THANKS. (That's all Sue needs is hundreds of beer cans to add to the clutter of your DX gear and paraphenelia, Ken, hi!--jfc). Don't laugh, but got my CB ticket...KAET9647, but use infrequently. 73s, Ken!

Your editor's report follows on the next page. Boy, have I been having antenna problems! (See comments next page) My "temporary set-up", used during October and November, consisted of the old faithful V-125 @20 ft., and a 4-bay UHF @25 ft., both HAND-ROTATED. When DX was up, one could see me climbing up on the roof to change the antenna heading!! Since I've been having problems getting the 7' dish up, my "new" temporary (but a little more permanent) set-up is as follows: V-150 @30 ft., 2 stacked 4-bays @25-30 ft. w/AC-4990, both w/rotors.

SOUTHERN TV-DX January 1977

Octob				TICAL !	-	19	ULIA	וכ עד ספו	2804	(ED.	r/E	ST)	(30)	5)843-48	29	
		San Maria			1		10000	37 2 X 1	No. of Street	100						44 8 45
2 E	1733	XEW-2	DF 1	1295	25	M	0536	WJBK-2	MI	T	27	M	0522	KYW-3	PA	868
		Mexico (City	11			0636	WNEW-5	NY	T			0528	WSYR-3	NY	T
		(estado			26	M	0527	WJBK-2	MI	965	101	T		WXGA-8	GA	198
14 T	0945	WECA-27		221		-		WCBS-2	NY	942	29			WKYC-3	OH	887
17 -	0,77	Tallaha						WKYC-3	OH	887	-	T		WTOC-11	GA	242
	0045	WJCL-22	United States of the States	242				WSYR-3	NY	T	31	1000	100 July 1860 1800 1800	WDTB-13		T
	STREET, STREET		FL	T				High property and the second	1000000	CONTRACTOR SERVICE	יכן	1				
		WJHG-7		13 mg(340)		m		WPVI-6	PA	868				WJHG-7	FL	T
		WJCL-22		242		T		WJHG-7	FL	T				WAGA-5	GA	T
		WJCL-22		242	07	m	Mary Comments of the Comment of the	WTOC-11	GA	242				WSAV-3	GA	242
The second of the second		WCKT-7	FL	191	27	т	0510	WCKT-7	FL	191		3-	1045	WJCL-22	GA.	242
Novem		MTGT 00		040					9	0001		,	+ 1000			
1.00	VANCE COUNTY	Carlo	1270-3270	LEAN COLUMN			Unresidente de la facilitation d	WTVY-4	AL	299	25	(100000000000000000000000000000000000000	alled AC.	10 Smith Colonial	
		WTOC-11		242	11	T		WJHG-7	FL	274			1 - 10 and 10 an	amp on 4.	2000 HBa-32	
		WNOK-19		392				WDTB-13		263		E	13.10(31.04)(4.04)	CKVR-3	ON	T
		WJCL-22	GA	242				WJWJ-16		T				WGR-2	NY	T
		WEBA-14		320				WFSU-11	FL	T				WEWS-5	OH	T
	0853	WDHN-18	AL	T	15	T	2345	WJHG-7	FL	274			1726	WLWT-5	OH	T
1	0904	WOLO-25	SC	380			2345	WDTB-13	FL	263	- 1-		1730	WBEN-4	NY	986
	0904	WRLK-35	SC	385	116	T	0004	WTVY-4	AL	299			1730	WKYC-3	OH	887
4 1 5 5	0905	WTOC-11	GA	242			0024	WFSU-11	FL	230	26	E	10.000.025.05	unIDs-2	.3 C	CI
	0907	WRDW-12	SC	T			0043	WECA-27	FL	221	27	M	1322	WDTV-5	WV	T
		WCKT-7	FL	191			0655	WJHG-7	FL	274	150			WEBA-14	SC	320
M	0532	WJBK-2	MI	T				WDTB-13		263	3			WJWJ-16		290
	Charles San Francisco	WCBS-2	NY	942				WJWJ-16		290	300			WRJA-27		373
		WPVI-6	PA	868				WYEA-38		341				WECA-27		221
	The State of the Color of the	WTOC-11	GA	242				WECA-27		221				WABW-14		244
		WEBA-14		310				WJWJ-16		290				WXGA-8	GA	198
	COUNTY DECORATION	WJCL-22		242			Of the second of	WABW-14	23-310-72/	244		M	CHARLES OF THE SAME	unID-11	25/20/10/2009	INK
			SC	7 T						Library Control Control						THE PERSON NAMED IN COLUMN
	[H9][[[A]][[A]][[A]][[A]	WRDW-12	0.000.00					WJHG-7	FL	274		•		WFSU-11	364	230
		WJCL-22		242				WDTB-13	C-9/00/6	263			Chipping convenience	WJHG-7	FL	274
		WTOC-11	GA	242	17/			WSAV-3	GA	242	3.5			WDTB-13	FL	263
	DATE AND LOCAL DESIGNATION OF THE PARTY OF T	WECA-27		221			05.045.055.04	WJSP-28	0.000000	357	10.50			WCKT-7	FL	191
	August 12 Comp.	WABW-14	CONTRACTOR OF THE PARTY OF THE	244			A STATE OF THE PARTY OF THE PAR	WYEA-38		341			30-30-6 A	WPLG-10		191
		WJHG-7	FL	274			The property of the contract	WECA-27		221	735			WKID-51		191
				263	-				GA	244	1043			WSAV-3	GA	242
		WFSU-11	FL .	230				WMAZ-13	GA	318	28	T		WSAV-3	GA	242
10 T	0705	WEBA-14	SC	320	17	M		WJBK-2	MI	T			0742	WECA-27	FL	221
	1713	WDTB-13	FL	263			0523	WCBS-2	NY	T	30	T	0640	WJWJ-16	SC	T
	1713	WFSU-11	FL	230	1		0524	WKYC-3	OH	887			0641	WYEA-38	GA	341
	1713	WJHG-7	FL	274			0527	KYW-3	PA	868			3 100	100	5-4	(FOS)
	1746	WECA-27	FL	221				WPVI-6	PA	868	m'r				W	FIV
		WSFA-12		T	18	T		WJWJ-16	SC	290			1			
		WXGA-8	GA	198	1	0.		WRDW-12	SC	T						110 E
		WDHN-18		301	-		The same of the same of	WRJA-27	SC	373			-		100	
		WABW-14		244			2325	WJPM-33	SC	408			204	Same a second	***	
	CHARLEST VICE TO THE	WGIQ-43		329	1			WITV-7	SC	T			U	/TVT		
Decem					I	-	_,_,				-			7 1 7 1 A	June	3

2 Dismantled temporary antenna system (V-125 at 20', 4-bay w/AC-4990 at 25').

4 Intended construction of new antenna system never materialized. Time and and other factors worked against us. It was also decided that VHF and

UHF antennas should not both go on the tower.

6 Managed to wreck V-125 while trying to erect it at 30°. (To say the least, I was a bit upset). Purchased a "V-150". The V-125 has been discontinued by Radio Shack. The V-150, while touted as having better range, has fewer elements than the old V-125 and seems to be generally a poorer-performing antenna. Nevertheless, it's all I can presently afford.

7 Installed V-150 at 30' on Alliance T-45 rotor. Although it is 5' higher than where I had the V-125, reception under dead cx seems to be not as good.

With all the hassles I'm having lately antenna-wise, it's almost enough to make me want to give up the hobby! (Almost, but not quite, hi.) I'll be using the V-150 probably through the winter Es season. Eventually, I hope to construct a couple of home-brew ch. 7-13 yagi and stack them. Also, maybe a ch. 2-6 yagi, too. If any members have information concerning building antennas, please contact me. Maybe 7' dish will go up soon.....I can only hope!!

EASTERN TV-DX

Bill Thompson 1907 Seneca Street Buffalo, NY 14210

January 1977 TV-DX from the Northeastern U.S. and Bastern Canada

Trope conditions in late fall practically everywhere in the East were about as poor as they can possibly be. An unusual flow of very cold arctic air has penetrated deep into the Eastern Seaboard, causing some of the worst wintry weather since the early 1960's. If the winter turns out to be as severe as some experts predict, tropo won't be making any DX news for some months! Hopefully, some mid-winter Es activity will have taken place by this time.

Chris A. Corso 78 McAdam	Avenue Toronto, Ontario M6A 187	(EDT)
September	12 Tr 1030 Youngstown U's 12 Tr	1030 W72AQ-72 NY146
Tr 0100 Erie PA U's	Brie U's	
WICU-12 PA 135	CICO32-32 ON 195 19	1015 WJET-24 PA 135
WUAB-43 OH 200	CHLFT2440 ON 85	WYTV-33 OH 200
0200 WFMJ-21 OH 200	WUAB-43 OH 200	WSEB-35 PA 135
CHLFT2-40 ON 85	WPGH-53 PA 250	CHLFT2-40 ON 85
1035 Erie PA U's	WKBD-50 MI 200	WUAB-43 OH 200
W46AB-46 NY 103	W46AB-46 NY 103	WPGH-53 PA 250
(WNED-17 xltr)	(WNED-17 xltr)	WQIN-54 PA 135
WUAB-43 OH 200	WTVS-56 MI 200	W72AQ-72 NY 146
1100 W72AQ-72 NY	WGPR-62 MI 200	(WNED-17 xltr)
(WNED-17 xltr)		· · · · · · · · · · · · · · · · · · ·

"Also all evening of September 19th, same stations noted as during day, plus Rochester's U's & V's and WNEO-45 Alliance, Ohio. Also CCI on WNED-17 Buffalo from WJAN-17 Canton OH (270 miles away)."

Steven Sprachman Bex 88 Moffitt Hall Plattsburgh, New York 12901
"There hasn't been much DX up here since I've getten here in September. There have been a lot of new stations added to my list. All stations received always except those marked (*): CBFT-2 Montreal QB (55mi); CBOT-4* Ottawa ON; CBNT-6 Montreal; CHLT-7 Sherbroeke QB (75mi); METW-8* MT Washington NH; ????-5 Trois Rivieres QB?; CKSH-Y Sherbroeke QB (75mi); CFTM-10 Montreal; CBVT-11 Quebec City QB (tentative); CBFT1-11 Laurentians QB (tentative); CFCF-12 Montreal; CJOH-13* Ottawa ON (120mi); CKTM-17 Trois Rivieres QB (125mi) CIVM-17 Montreal; WVTB-20* St Johnsbury VT (85mi); CICO-24 Ottawa ON; WVER-28 Rutland VT (80mi); CFVO-30 Hall QB (125mi); WVTA-41 Windsor VT; WLRD-49 Littleton MH; W61AE-61 Enosburg VT. Locals are WCAX-3 Burlington VT (35mi); WPTZ-5 Plattsburgh (11 mi—the transmitter can be seen from one of the windews!); WEZF-22 & WETK-33 Burlington VT (35mi). That's how it looks as of now. I den't get much time to DX because of an extremely hard load of reading."

Fred Nerdquist 7945 Boxfo	ord Road Clay, New York 130	041 (EDT)
August 1975	16 Es 1812 WCTV-6 GA 965	17 Es 2345 WDAY-6 ND 1035
8 Tr 2150 WAKE-23 OH 295	2005 unID-6 CUBA	19 1830 KAAL-6 NN 830
Akron	21 2100 KGFR-2 ND 1060	Austin
23 Es 1900 KTVI-2 NO 785	Grand Forks	1900 KNOP-2 NE 1255
Mevember 1975	26 2030 WCBD-2 SC 755	1907 KPRY-4 ND 1200
4 Tr 2323 CFPL-10 ON 255		21 Tr 0000 CITY-79 ON 170
May 1976	2233 WCIX-6 FL 1225	Toronto
17 Rs 2330 WCIV-4 SC 755	"End of N. Syracuse logs"	23 Rs 1830 KGFB-2 ND 1055
23 1515 KNOP-2 NE 1255	July (Clay leggings)	27 1820 WDSU-6 LA 1195
June and with hand the back of	16 Es 1800 WOWT-6 NR 1000	August
4 Es 1230 WTVJ-4 FL 1225		2 Ks 1827 WDBO-6 FL 1055
Miami da da	1830 KTCA-2 MN 850	October
6 2030 WABG-6 MS 1000	17 1200 KUSD-2 SD 1030	2 Tr 2305 WICU-12 PA 210
16 1730 WDB0-6 FL 1055	1300 KPRY-4 SD 1200	Brie
Orlando	Pierre	

loy Barstow 70 Heritage	Circle	Teaticket, Mass	sachusetts 02536	(617)548-2329
September	15 Tr	0030 WHP-21 PA	20 Tr 0900	WHIRO-15 VA
4 Tr 2100 WBOC-16 MD		0100 WHAG-25 MD		WBOC-16 ND
WCPB-28 MD		2100 WBRE-28 PA	0915	WAPB-22 ND
2200 WBFF-45 MD		2130 WSBA-43 PA	ACTOR	WCPB-28 MD
5 0001 WCVE-23 VA		2155 WSKG-46 NY		WYAH-27 VA
0010 WMPB-67 MD		2205 WBJA-34 NY		WTAF-29 PA
0015 WSBA-43 PA	16	0045 WUTR-20 NY		WT.VT-39 PA
We'll have more of this	report	, along with Roy	's comments, next	month -ht)

"New location definitely helps on fringe reception of Rochester and Canada."

12

NTRAL TV-DX

William J. Draeb Ellis St. R.R.#2 Kewaunee, Wi 54216 Deadline: 110 th

For dxers in---II. In. Ia. Mi. Mn. Oh. and Wi.

Buck Battin: 4305 Pitt St., Duluth, Mn 55804
"I'm now back in your territory again. I last reported to your column from Shreveport, La. Then I moved to Rapid City, SD. Now here I am in Duluth where I'm News Director at KDAL-3, a station I once logged (Es) from Albuquerque, NM.

I was in Rapid City only about four months. I never got the chance to dx there at all.

I expect to be in Duluth a lot longer. If the weather holds up I'll start putting up my antennas in a week or two.

I'm on relatively high ground here, but there's higher ground to the North and West which may interfere with dxing in those directions. (One can't buy a home just for dxing, I guess.) It's clear to the East and South where most of the stations are anyway.

Hopefully, I'll have some reception reports on the way shortly. "(This letter was postmarked Nov. 19 -- wd; the following report was postmarked Dec. 3 -- wd)

"I now have most of my antennas up and I'm once again dxing. So far, I've installed the following: for UHF a Jerrold JUP-4 "Para-cyl"; a Jerrold 10 element hi-band yagi, (rotated on the same mast with the JUP-4) and a Jerrold 10 element low-band yagi (rotated separately.) Still to be installed is another 10 element low-band to be mounted vertically and a ground-plane I use on a 30-50 Mhz radio to detect Es building up.

It's been freeqing cold here since I got my system partially installed and there's been very little here in the way of dx. In any case, here's what I've been able to pull in so far:" The following report covers 11-20 to 11-26-wd.

20 Tr 1830 WEAU-13 W1 145 21 Tr 1845 WHWC-28 W1 135 2300 WKBT-8 W1 210 23 Tr 0730 WHLA-31 Wi 210 24 Tr 0145 WBHM-2 on ch.9 24 Tr 0120 KMSP-9 Mn 140 from West; cable?? 25 Tr 0050 WJMS-3 Mi 250 0100 WAN-2 Wi 180 0120 WRAY-2 Wi 255 26 Tr 0730 WHRM-20 Wi 180 2250 WFB-13 Mi 225 0130 WTCN-11 Mn W 2305 WARD-12 W1 155 2313 WSAU-7 W1 180 0140 WCCO-4 Mn

The previous report was edited. Stations under 200 mi. were left out unless they were new. Other reports will get the same treatment. -- wd.

Michael L. Hogan: 9224 Cottage Grove Ave., Highland, In 46322 CST "Some unusual Es openings have been observed for this reporting period. Let's hope this is a sign of a good mid-winter opening. (Amen to that--wd) 73's and happy holidays. H

11-17 Es 1926 KATC-3 La 5325 Log now at: 42 stations in 10 states.

1930 KETX-3 Tx 4123

Robert Zent: 1835 Fruit St., Huntington, In, 46750 EST report covers 11-15 to

15 km 2000 CKCW-2 NB 1080 15 ks 2037 WLHZ-2 ME 875 16 Tr 1980 Kentucky U's 2013 CHHT-3?NS 2100 WGBH-2 MA 745 25 Tr 2125 WKPT-19 TN 350 2127 WSWN-47 VA 325 The control of t 11225

ing. The tuner seems to be extremely accurate with repeatability far better than my Sony."

William J. Draeb; Ellis St. R.R.#2, Kewaunee, Wi. 54216 CST The following report covers 11-13--12-5. 25 Es Ki

25 Es KBTX-3 TX@1610 1079 13 Tr 1856 KINL MO 432 2040 WMUL WV 498 16 Tr Springfield, 1621 WBRZ-27LA 1002 Mo: U's(588) KPRC-2 TX 1118

15 Tr 2118 KDNL MO 432 16 Tr 1816 KHIN IA 457 17 Tr 1827 KDNL-30 432 MO 1643 WCBD-2 SC 916
25 Tr 0743 WKYT-27 KY 473 Dec 4 Tr 1403 KDNL-30 MO 432
Es 1610 KATC-3 LA 1026 5 Tr 2105 Cleveland U's

KJAC-4 TX 1080 1853 WOST OH 395 2030 KDNL-30 MD 432

"A rather dismal month even with the unexpected Es. The 'deep freeze' temperatures continue here. About the only way to log any DX is on Ms or Aurora."

WESTERN TV-DX

Doug Everitt 1710 W Maine Enid OK 73701 Deadline: 10th

For TV DXers in all states west of the Mississippi in whole except Iowa, and Canadian provinces Manitoba and west.....send in your report today!

A few changes are taking place in this column. First, note the new address. My DXing and column editorial facilities are moving into a small house next door, so all reports should now be sent to this new address.

So as to standardize reporting deadlines for VUD DX columns, this column's deadline has been reinstated at the 10th of each month. Reports arriving after the 10th

will not appear in the following VUD, regardless of importance.

UnIDs will now appear only when denoting conditions which would not otherwise appear in an individual report, and which warrant attention. Those long rows of UnIDs which fill the DX columns during the summer season will no longer be with us. If you have specific information, the best place to send it is to Frank Aden's CCI column; I'm sure he'll be glad to help you ID your catches.

As a further measure to save space, all reports will now be prepared in the three column format. Also, reports of DX under 200 miles (320 km) will be heavily edited unless station is new-to-air, an unusual translator logging, or comprising

the major part of a new reporter's contribution.

All of this is intended to make the VUD a more compact and attractive magazine, and to allow the presentation of more technical material; something that's a bit hard with bloated DX columns. As always, your comments are appreciated.

Bob	Y	oung,	1502	W.	Bro	adway	,	Enid	OK	7370	[(N	ove	nbe	(1)	IAE AA	RE	PUK	IEK			
		2000								0900					17	tr	0900	KBMA	41	MO	260
17	tr	0900	KTVJ	16	MO	220		tons			KTSB	27	KS	220	2772			WIBW	13	KS	220
			KOZK	21	MO	270					KCPT	19	MO	260				KODE	12	MO	220

I'm amazed at what one can see on an old black & white set, rabbit ears, and a loop. 73, W5UOT (Bob's logging of WIBW 13 is notable, as KETA 13 was on at the time. I'm trying to sell Bob a rooftop antenna; if he does this well on indoor antennas, wonder how he'll do on a large log?--de)

John Anderson, Box 186, Lowe	Farm MB ROG 1 EO	
September	06 tr Minot, Bismarck,	15 tr 1100 KTSD?10 SD 370
02 Es 0135 CKSA2 2 AT 630	Aberdeen, Duluth Vs	17 tr 2300 KTCA 2 MN 360
0205 CFAC 2 AT 757	above normal in AM;	0000 WTCN 11 snowfree
Au 0225 thru ch.4 with	Duluth Vs in evening	October
nice display	15 tr 1100 KSEV 13 SD 405	11 Re CRYAT 2 AT 840

A few dates in September proved to be quite interesting tropo-wise. No UHF was seen during these sessions. Possibly the antenna is too low (25 feet), or else the system isn't working properly--maybe the preamp? I don't notice a change on the screen as I plug in the amp. With the VHF amp, I do notice a change; intensity of snow, audio noise, etc. Best of DX & 73, John

Jim Pizzi. 300 Park. Orcutt	CA 93454 (PDT) Log at 183	
July	August	03 Es 0855 KTWO 2 WY
31 tr 1130 KTXL 40 CA	01 Es 1854 KCKT 2 KS	0907 KREM 2 WA
1134 KCST 39 CA	1854 KARD 3 KS	04 Es 1640 XHI/XEPM? 2
1134 KPBS 15 CA	02 Es 0853 KMID 2 TX	05 Es 0856 KRTV 3 MT
Es 1450 KMOL 4 TX	0853 KACB 2 TX	0856 KREM 2 WA
1451 KENS 5 TX	0853 KWAB 4 TX	0927 CFAC 2 AT
1501 KAVE/KAUZ? 6	0859 KMOL 4 TX	0929 KMID 2 TX
1530 KDFW 4 TX	0929 KRGV 5 TX	0929 KTVQ 2 MT
1533 & 1535 MUF ap-	1424 XEPM 2 CH	1922 KDUH 4 NE
parently ch.7	1426 XEJ 5 CH	15 Es 1032 KMID? 2 TX
1559 KTVY 4 OK	1500 KDBC 4 TX	1034 KACB? 3 TX
1559 KFSM 5 AR	1500 KWAB 4 TX	(Jim also notes off-season
1600 KMID 2 TX	03 Es 0855 KNOP · 2 NE	Es 17 Sep & 23 Nov ch.2de)

	Enid OK 73701 (CST) (November)	THE LABOUR THE REST LINE
12 MS 2135 KIII? 3 TX 600	17 tr 0838 WKMU?21 KY 530 18 tr	0005 KERA local level
14 Es 1024 WCBD? 2 SC 1060	0842 KNCT 46 TX 380	0014 KLTV 7 TX 320
1056 WESH? 2 FL 1100	0929 WLKY 32 KY 680	0041 KCBJ 17 MO 350
1100 WSAV/WEAR? 3	previously as tentative	0800 same as 17th,
1153 WDIQ? 2 AL 750	0930 WUSI?16 IL 570	minus KY stations
16 tr 1940 KMCC 28 TX 280	Es 1858 WSJK 2 TN 800 24 Es	1700 CKGN2 2 ON 1180
17 tr 0834 WICS 20 IL 510	1859 WWAY 3 NC 1140	1700 CKVR 3 ON 1060
0835 KTEJ?19 AR 410	1905 WCYB? 5 VA 880 tr	2354 KTHV 11 AR 350
0837 KDNL 30 MD 450	1929 WFMY 2 NC 1020 25 tr	0630 WQAD 8 IL 530

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WESTERN TV DX
Doug Everitt continued ...
                                                          25 tr 0840 KCMO 5 MO 260
                             25 tr 0731 KFVS 12 MO 470
25 tr 0633 KPLR 11 MO 450
                                                             Es 1540 WCBD 2 SC 1060
                                   0735 KTEJ 19 AR 410
      0650 KDNL 30 MO 450
                                                                1600 WFMY 2 NC 1020
                                   0745 WEHT?25 IN 590
      0656 WAND?17 IL 540
                                                                1610 WBTV 3 NC 970
                                   0800 WAND 17 IL 540
      0657 WUSI?16 IL 570
                                                                1611 WUND 2 NC 1190
      0659 KMBC 9 MO 260
                                  0823 KOMU 8 MO 350
      0725 KRCG 13 MO 350
                                   0830 KQTV 2 MO 280
                                                               1611 WUNC 4 NC 1150
                                                       1641 WWAY 3 NC 1140
      0729 KHIN 36 IA 340
                                  0835 KOLR 10 MO 270
   For a November, it was quite a month. Thanksgiving was nicely celebrated by the
profusion of tropo and Es. Both the tropo and Es were quite strong. WBTV 3 was in
for about 30 minutes like a local, with WWAY doing the same after WBTV's fadeout.
Combine good DX and lots of turkey, and you have a content editor!
   I might note that KOCO 5 & KOFM 104.1 were both off the air for several hours
on Thanksgiving, centered around noon, local time. Strong winds were in the area.
                                                  NOT EXCITING?
Bob Cooper, Jr., Rt.5 Box 782, Guthrie OK 73044
  Aside from some tropo and off-season Es, this was not a terribly exciting period
here. My 7-20-76 logging of SS Es 2207-2220 ch.3 turns out to be PJF-TV, St. Martin,
a Dutch island east of Peurto Rico; double E at about 2500 miles. Country #10 here.
   Tropo on 10-25/26 was more of December/January variety, which, come to think of
it, more aptly describes the weather in October as well!
                            12 tr 0655 KHTV 39 TX
                                                        26 tr 0718 WMAW 14 MS
October
                                  0725 KDNL 30 MO,
                                                              0718 WACS 20 GA 790
06 tr 0745 KDNL 30 MO
   Es 1905 to 2030:
                                       KCBJ 17 MO
                                                              0718 WDCO 15 GA 865
                            15 MS 1900 KDLO 3 SD
                                                              0730 WCFT 33 AL,
      XHI/XHFA? 2
                            17 tr 0850-1050 & 1820-
                                                                   WLOX 13 MS
08 tr 0745 KDNL 30 MO
                                  1825 KDNL 30 MO
                                                              0730 WABW 14 GA 885
11 This tropo break tele-
                            21 (Bob notes several Es
                                                              0734 WAIQ 26 AL
   graphed itself on wea-
                              periods-no IDs--de)
                                                              0739 KAFT 13 AR
   ther map nite of 10th,
                            24 tr 1650 KDNL 30 MO
                                                              0741 WIIQ 41 AL,
   but I forgot to pull
                                                           WYUR 48 AL, WGIQ 43 AL,
                            25 tr 1820 KTEJ 19 AR
   alarm button -- drat!
   tr 0655 KMNE 7 NE,
                                  1846 WMAV 18 MS
                                                                  WFIS 36 AL
                                  2028 KNCT 46 TX.
   KMBG 14 IA, K18AA KS,
                                                              0753 WMAH 19 MS
                               KVUE 24 TX, KEDT 16 TX,
                                                              0836 WHTV 24 MS
   KXNE 19 NE, KVFD 21 IA,
                                       KTVV 36 TX
                                                        Shut it down for several
   KDOG 26 TX, KHNE 29 NE,
                                  2121 KLAA 14 LA,
                                                        days-gone thru late 28th.
   KHIN 36 IA, KBIN 32 IA,
                               WAPT 16 MS, WAAY 31 AL,
                                                        November
           KCBJ 17 MO
                               KHNE 29 NE, WHIQ 25 AL
                                                        01 tr 0657 KVFD 21 IA
      0756 start of the
   good stuff: K48AA,
                                  2155 WFIQ 36 AL
                                                             still not on 50
                                                              0657 KHIN 36 IA.
                            26 tr 0458 WYBA 38 GA,
   K5ØAB, K52AB, K54AC,
                               KNOE 8 LA, KLFY 10 LA
                                                                   KHNE 29 NE
   with K46AA added at
                                  0528 WXIA 11 749mi.
                                                             1850 WAPT 16 MS
   0845 s/on; from St.
                                  0528 WJTV 12 MS,
                                                              1917 WMAV 18 MS
   James MN. K56AJ from
                               WTCG 17 GA, WRBT 33 LA,
                                                              2138 KDNL 30 MO
   Basset NE.
                                                        17 tr 2100 KAMU 15 TX,
                                       WHEA 26 GA
      0821 KYNE 26 NE,
                                  0537 KPLC 7 LA
                                                           KVUE 24 TX, KDOG 26 TX,
   K8ØCP Beatrice NE
                                  0545 WMAZ 13 GA 807
                                                           KTVV 36 TX, KNCT 46 TX
      0930 K56AF, K58AE,
                                  0559 WCWB 41 GA 807
                                                              2145 KHTV 39 TX,
   K6ØAK, K64AH, K66AL
                                  0610 WKAB 32 AL,
                                                           KEDT 16 TX, KWEX 41 TX
   from Clarinda IA.
                               WAPT 16 MS, KTVV 36 TX,
                                                        18 tr 0640 KCBJ 17 MO.
      1013 KDSD 16 SD
                                       WCOV 20 AL
                                                           KDNL 30 MO, KRCG 13 MO, .
Love those 4-6 translator
                                  0628 WBMG 42 AL
                                                           KHNE 29 NE, WICS 20 IL
clusters! 11 new stations,
                                  0636 WGNO 26 LA,
                                                        24 tr 2245 WAPT 16 MS,
bringing totals to 682.
                               KDOG 26 TX, KVUE 24 TX,
                                                                   KVUE 24 TX
This was heaviest overload-
                                                        25 tr 0800 KHIN 36 IA,
                                       WHNT 19 AL
ing of UHF preamps I've
                                  0717 WMAA 17 MS,
                                                           KCBJ 17 MO, WICS 20 IL,
ever experienced; even the
                                                           KDNL 30 MD, KBIN 32 IA,
special 50-83 preamp over-
                                       KHNE 29 NE
                                  0718 WJSP 28 GA,
                                                           KRIN 32 IA, KMBG 14 IA
loaded from signals above
50 at one point.
                               WMAO 23 MS, WMAV 18 MS, 0952 WFIE 14 IN,
12 tr 0655 KDOG 26 TX
                             WDHN 18 AL, WMAU 17 MS
                                                                   WEHT 25 IN
   November was a poor month, coupled with extensive traveling (14-17 Nov,01-03 Dec)
Richard Noel Allen, Billings OK 74630 (CST) (November)
Receiver: Sony KV1212 color
                            Antennas: 44-el.UHF log, 11-el.VHF log
01 tr 0548-0552 KTXS 12 TX 17 Es 1810-1830 WSJK 2 TN 18 tr 0737-0738 KIDZ 24 TX
                                1851-1900 WBTV 3 NC
17 tr 0535-0701 Dallas/Ft.
                                                             0737-0747 KAFT 13 AR
Worth, Topeka, KC, & Joplin
                            18 tr 0653-0700 KRCG 13 MO
                                                             xmtr Winslow AR
   Es 1750-1846 WUND 2 NC
                                  0653-0725 KDNL 30 MO 25 tr 0658-0716 KDNL 30 MO
      1757-1830 WFMY 2 NC
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0657-0725 KCBJ 17 MD 0710-0716 KFVS 12 MO (continued on page 31)

NORTHERN FM-DX

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

January 1977

Unusually cold weather with rapidly moving weather systems from off of the polar ice cap has kept long haul tropo down to a minimum here in the Northeast. So far no Es noted in December. The only reliable DX has been MS. Only three reports arrived this month. I know some of you are holding back lots of reportable DX loggings. So if you live north of the Mason-Dixon line and east of the Mississippi River (MN WI IL IN MI OH PA NY VT NJ CT MA RI ME NH and Ont Que N.B. N.S. PEI NFD inclusive) please send in your reports now!

```
Peter Sawatsky - 244 Neilson Ave. - Waterloo, Ont. N2J 2M3
RX: Heathkit AJ-15; Ant: Delhi 1047 @ 30°; new underlined; Loggings on MS tape control
unit asterisked; EDT to Oct. 29, EST after.
9/30 MS *KSLH 91.5 MO St. Louis (605) ID (Taped between 0730 & 1900)
10/1
           *WREL 102.9 GA Columbus (800) ID (Taped between 0000 & 0730)
           KERA 90.1 TX Dallas (1130) (lasted nearly 2 minutes) nx, promo, hrd at 0733.

**KANU 91.5 KS Lawrence (820) ID, Time check at 1530

**WHKY 102.9 NC Hickory (540) (Taped between 0730 & 1700)
10/4
10/21
10/26
           *WOI 90.1 IA Ames (670) Time check, ID (1st time by MS, previously by Es)
10/30
11/4
           *MMBI 90.1 IL Chicago (375) ID (Taped between 0800 & 1730) hrd previously by Es
11/12
           *WABE 90.1 GA Atlanta (710) (received on tape on 2 completely separate bursts
                                            between 0800 & 1800, both with good ID's)
```

Robert Eddy - Box 338 - Newport, OH 45768

For the past 4 months I've been experimenting with a 16 bay bowtie antenna for FM The screen reflector is 20X37 ft. and held in place by three 30 ft. towers. The reflector is made of 2 in. chicken wire. Orintation is 75 deg. Gain averages 8-10 db over a CM Stereo probe-9 at 50 ft. F-B ratio and directivity are great. My eastern PA and MD loggings below were made on the bowtie array -- all were impossible on the Stereo probe because of cochannel QRM. Future plans call for dismantling the bowtie array and replacing it with a Laport rhombic capable of 27 db. gain (if constructed properly)

```
7/26 Es 2105 KCIL 107.1 CO ID
                                           8/20 Tr 2340 WNWZ 92.5
         1929 NCFR 90.1
1944 KYEZ 93.7
7/27
                          CO ID
                                                    2354 CKGL 96.7
                                                                     ON k
                          K. ad, ID
                                                    2356 WDYL 92.1
                                                                     VA g
                                          8/21 Tr 2356 WRCV 92.1
8/29 Tr 1700 WCAR 92.3
         1950 KTEC 92.7
                          LA ID, mx
                                                                     PA r, ID
         2009 KULP 96.9
                          TX ID
                                                                     MI ID
7/30 Tr 2227 WKOF 100.3 KY ads
                                          9/11 Tr 1814 WXIN 104.1 PA ID
         2305 WINQ 106.5 TN s/off
                                           9/19 GW 2055 WITB 91.1
                                                                     WV r
8/8
     Tr 1835 WERE 98.5
                                          10/26 Tr 1801 WDAC 94.5
                                                                     PA ID, mx
                         PA wx
         1850 WCRH 90.5
                        MD mx,wx
                                                    1816 WQCM 96.7
                                                                     MD r,ads
                                                    1856 WGCB 96.1
         2059 WLAN 96.9
                         PA ID
                                                                     PA g
                                          10/31 Tr 1802 WSBA 103.3 PA ad,wx
8/10 Tr 2131 KTMO 98.9
                         MO ads
         2229 WMIX 94.1
                                          11/9 Tr 1917 WQQQ 99.9
                          IL ad
                                                                     PA ad
                                          11/11 Tr 1958 WWSH 106.1 PA promo, ad
2044 WJBR 99.5 DE ID
         2243 KEZK 102.5 MO ad,mx
                        IN ad, BB
         2247 WSVL 97.1
         2258 WIL 92.3
                        MO mx, ID
                                          11/15 Tr 1938 WVSP 90.9
                                                                     NC nx
         2300 KFUO 99.1
                         MO ID, c
                                                   1957 WDCG 105.1 NC mx
8/11 Tr 2000 WHOP 98.7
                                          11/17 Tr 1858 WCPS 104.3 NC nx,wx,ID
                         KY ID
         2058 WXTZ 103.3 IN ID, mx
                                          11/18 Tr 1859 WBBC 93.5
                                                                     VA ID, mx
         2101 WLBH 96.9
                          IL ad, mx, wx
                                                   1907 WWCS 106.9 MD k
                                          11/22 Tr 1919 WMNA 106.3
         2200 WART 98.3
                          IN BB. ID
                                                                    VA nx
                                                   1953 WEOR 96.9
8/16 Tr 2126 WDBR 103.7 IL ad.wx
                                                                     NC annt
                                                   1959 WDBM 96.9
         2150 WNES 101.9 KY BB, ad
                                                                     NC ad
8/20 Tr 2128 WGBI 101.3 PA r,ID
                                          11/26 Tr 1508 WUVT 90.7
                                                                     VA ID
                                                   1528 WWDM 101.3
         2142 WBEN 102.5 NY promo
                                                                     SC promo
                                          11/27 Tr 2000 WSTS 96.5
         2159 CJRT 91.1
                          ON ID, j
                                                                     NC g, ID
         2204 CFCA 105.3 ON mx,wx,ad
                                                   2328 WDAS 105.3 PA s.
                                          12/2 Tr 1934 WLOS 99.9
        2301 CKTB 97.7
                          ON nx,wx,r
                                                                    NC nx, ad, wx, ID, mx
        2331 CKPC 92.1
                          ON concert
                                                   2006 WTZE 100.1 VA nx
                         NY wx, lcl annt (Please include towns with your loggings - fn)
        2337 WSEN 92.1
```

Ralph Strobel - 2510 E. McGalliard Road - Mincie, IN 47303 (EST)

Eqt: RX - Heathkit AJ-1510, Ant - Winegard. New underlined. Total: 603.

9/2 Tr 0100 WAED 107.9 KY Ft. Campbell 9/6 Tr 0500 WZRO 104.9 IL Peking,k,\$

9/3 0000 WTAS 102.3 IL Crete, m\$ 0000 WROE 94.3 WI Neenah,m,\$

9/5 0100 KRVR 106.5 IA Davenport, m\$ 9/7 Tr WKYG WKYG 103.1 WV Parkersburg,k,\$

(The balance of report to appear next month - fn)

OUTHERN FM-DX

EDITOR:

DAVE COX

January 1977

Send reports to:

2007-E Brandywine Ct. Birmingham, AL 35216

Next deadline:

January 10th February 10th

November weather had a devastating effect on DX in the South as temperatures continued to drop during the month with below normal readings being the rule and record lows being set on several days in many areas. Good conditions were further hindered in forming by an increase in precipitation (usually rain, but in some cases, snow and sleet).

It was, all in all, a very bad month for DXing. There were even no reports this month of short (100-200 mile) tropo. November was not, however, totally DXless as the efforts of Ken Simon brought him an off-season Es opening producing several loggings into the Midwest and Canada.

Kenneth R. Simon,

528 Pilgrim Road,

West Palm Beach, FL 33405

11-24-76

Es 1554 90.5 WKAR East Lansing MI \$,c mention of MSU, time (EST) & temp

1555 89 ? classical unID

1559 90.3 WBCL Fort Wayne IN #132 contest info, ID

1615 skip appeared to be gone by this time, but ...

1633 91.1 unID ag report; QRM-WLRN

1635 88.7 CJOM Windsor ONT m; with weather and ID
1638 91.1 CJRI Toronto ONT c; music, ID, then children's show; in til 1710 It's good to hear some FM skip again!!!

Congrats on the skip, Ken. Maybe, if we're lucky, it is a sign that the winter skip season will be a strong one.

Hope everyone had a Merry Christmas. Be sure to let everyone know about the DX and the new equipment Santa Claus brought to your house.

Happy New Year and Best of DX

EMORABILIA

Rebert J. Williams 251 6th Avenue East Twin Falls, Idaho 83301 Phone: (208) 733-3621 Deadline: 15th of month

Here is a QSL card that I (your "Memorabilia" editor) received in 1970 from WKY-4 (new KTVY):

VERIFICATION OF RECEPTION advising us of your reception

of WKY-TV in Deckelos

Transmitter and studio location: 500 East Britton Road, 6 miles North of Oklahoma City.

Frequency: 66-72 megacycles - Channel 4.

Video Power: 100,000 watts. Audio Power: 20,000 watts.

Tower Height: 25 feet.

500 EAST BRITTON ROAD OKLAHOMA CITY, OKLA.

How about sending in old PHOTOS of TV-DX of years gone by, guys? This is YOUR celumn, and old station IDs and test patterns (even though the station has since changed call, channel, etc.) would be MOST welcome. Of course, don't stop sending other material either, as it all makes this column what it is. Response has been very good so far, keep it up. 73s, Beb.

17

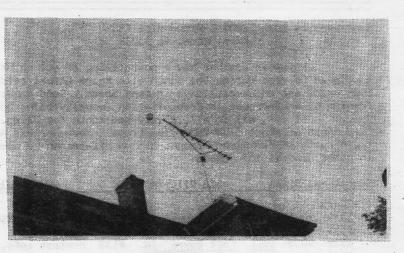
PHOTO-NEWS

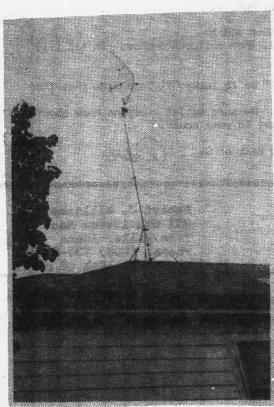
Jim Alexander 4 Brook Court Parsippany NJ 07054

January, 1977

Feature:

This month, PHOTO-NEWS pays its second visit to Buffalo, NY. Paul Traska's antenna system and DX "shack" are this month's feature material. Details of the equipment shown are at the bottom of this page.

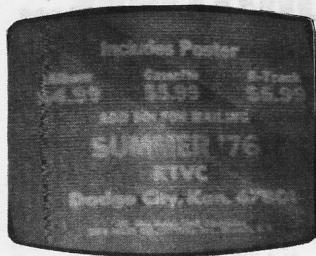






At the upper right of this page is a photo of a Channel Master model 366IG 34 element antenna for VHF/UHF/FM, mounted at 40°. A Winegard AC-895B amplifier is fed by this antenna. The antenna is turned by an Alliance C-225 rotor. Paul uses the antenna for VHF DXing, and it is also used for program viewing by the family. At the left is a photo of Paul°s Finco P-7 7° parabolic and CMA-Ub. The dish is mounted at 50°, with its mast anchored down by 8 guy wires. Part of Paul°s DX "shack" is shown at the right. In this photo are at the upper left a 12" Sharp TV, with a Panasonic cassette tape recorder just to the right of the Sharp. Below these is a 17" RCA color TV, and at bottom on the left the rotor control box for the RCA model 10W707 (which turns the dish), and to the right, the power supply of the CMA-Ub. By the way, if the mast the 7° dish is mounted on appears slanted, Paul notes that it actually is not, but came out that way in the picture.

PHOTO-NEWS continues with a page of TV-DX ...



KTVC- 6 Dodge City, KS 1,115 mile Es 6/28/76, 1320 EDT (EB)



KWTX-10 Waco, TX
440 mile tropo (RL)



WTVW- 9 Tupelo, MS 465 mile tropo 9/15/74 (JG)



WKBS-48 Philadelphia, PA 440 mile tropo (PG)



CKBQ- 2 Melfort, SK Es 7/7/76, 2130 PDT (FA)

Contributors:

EB = Ed Brindle, Latrobe PA

RL = Ron LeBlanc, Marrero LA

JG = Jim Gould, Kokomo IN

PG = Paul Gaines, Detroit MI

FA = Frank Aden, Bend OR

My thanks to Paul D. Traska, Buaffalo NY for providing this month's feature material.

73 and good DX,



The FM Non-IDers...

Below is a complete listing of all FM stations known by WTFDA sources to use non-identifying slogans, or non-IDs, in lieu of their assigned call letters, except as required by the FCC or DOC at the top of each hour. This compilation supersedes two previous VUD listings (June 1975 and April 1976). Our thanks to the following contributors: Rod O'Connor, Dave Cox, Mike Dalton, Bill Dickerman, Harry Hayes, Clint McAuliffe, and John Zondlo; and a special tip of the hat to Bruce Elving and his FM ATLAS for a wealth of information.

FREQ CALL LOCATION NON-ID	## STATES STATE STATES S
89.9 WJCT FL Jacksonville Stereo-90	95.7 WKSS CT Meriden Kiss 95.7 WZZM MI Grand Rapids Z-96 95.7 KKAJ OK Ardmore K-J
09.9 WJCI FL Jacksonville Stereo-90	95.7 WASS CI Meriden Kiss
90.7 WRGC FL Panama City Stereo-90.7	95.7 WZZM MI Grand Rapids Z-96
91.1 KCSM CA San Mateo FM-91	95.7 KKAJ UK Ardmore K-J
91.3 WSSU WI Superior 91-S	95.9 WLEQ FL Bonita Springs Super-Q
92.1 WBTR GA Carrollton Music-92	96.1 WTAE PA Pittsburgh 96-Kicks
92.1 WFEM PA Ellwood City C-92	96.3 WMJX FL Miami 96-X
92.3 WDBO FL Orlando Stereo-92	96.3 WBBM IL Chicago FM-96
92.3 KBBK ID Boise Rock-92	96.5 WJCL GA Savannah Stereo-96
92.3 WYCA IN Hammond FM-92	96.5 WKDD OH Akron 96-KD
92.3 WKTH NY New York FM-92	96.5 KRAV OK Tulsa FM-96
92 5 KPOX MT Havre OX	96 5 KAIM TX Houston FM-96%
92 5 KAFM TY Dallac K-92	96 7 WOCM MD Halfway 97-0
02 7 MOVO ME Norman 03 V	96 7 KYCD MN Crand Panide Kiy-96
02 7 LIDUY DA Charrier FM 02	06 0 UCDO NV Buffelo OFM-07
02 0 LIZCC CA Atlanta 7 02	06 0 LIVEC CC Charleston FM 07
92.9 WZGC GA ALIANIA	90.9 WAIL SU CHAFTESLOR FM-97
92.9 KFMD IA Dubuque D-93	9/.1 KWX1 TX FORE WORTH FM-9/
92.9 KFYR ND BISMATCK 1-93	97.3 WAIA FL MIAMI W-A-I-A
92.9 KKDQ ND Grand Forks 93-Q	9/.3 KEEZ TX San Antonio Rock-9/
92.9 WJAI OH Eaton WJ-93	97.5 WZOK IL Rockford FM-97
92.9 KSPZ CO Colorado Springs Z-93	97.5 CJOB MB Winnipeg, CANADA OB
93.1 WPOC MD Baltimore FM-93	97.7 WKEU GA Griffin Q-97
93.3 WQUE LA New Orleans Q-93	97.7 WTCQ GA Vidalia 98-Q
93.3 KSJM ND Jamestown Stereo-93	97.9 KUPD AZ Tempe K-100
93.3 WIZM WI La Crosse Z-93	97.9 WLHN IN Anderson Stereo-98
93.5 WSEA DE Georgetown Sea-93	97.9 WBAL MD Baltimore FM-98
93.5 WWWZ SC Summerville 3-W-Z	98.1 WOHO AL Andalusia 0-98
93 7 KMOT ND Minot M-93	98.1 WOSM NC Favetteville 0-98
93 7 WMVK NC Elizabeth City K-94	98 1 KSLO MO St Louis Super-O
93 9 KPTK CO Colo Springs Super-K-94	98 1 WCAH PA Philadelphia FM-98
03 0 WVC DC Washington 03 VVC	08 1 LITTE VA Pichmond FM-08
0/ 1 WHET MT Inches	08 3 UTOV NV Hempstood OV-08
0/ 1 VVT7 NV Handaman EM 02	00 5 UCCT OU Clareland C 00
94.1 KAIZ NV henderson FM-93	00 F INCD DA Harrana 00 F VCD
94.1 KUL WA Seattle K-92	98.5 WICK PA Hanover 90-5-ICK
94.1 CBL UN TOTONTO, CANADA CBC-FM	98.7 WMOD DC Washington FM-98
94.3 KVFM CA San Fernando Valley-94	98.7 WALU NY NEW YORK 99-A
94.3 KZZQ LA Golden Meadow Z-94	98.7 KCPX UT Sait Lake City Stereo-X
94.3 WWOC NJ Avaion Stereo-94	98.7 WNUK VA NOTIOIK FM-99
94.5 KWKH LA Shreveport 94-WKH	98.9 KLTA CA Dinuba Stereo-99
94.5 WRVQ VA Richmond Super-Q, Q-94	98.9 WHBF IL Rock Island Rock-100
94.5 KSTP MN St. Paul KS-95	98.9 WPBS PA Philadelphia FM-99
94.7 WMJC MI Birmingham Magic Radio	99.1 KUAD CO Windsor Quad-99
94.7 KYTN ND Grand Forks Y-95	99.1 WQIK FL Ft. Lauderdale Q-99
94.9 WKSJ AL Mobile Country-95	99.3 WSNN NY Potsdam Stereo-99
94.9 WINZ FL Miami Beach Zeta-4	99.3 WGGQ WI Waupun 99-Q
94.9 WLCY FL Tampa Y-95	99.5 WVOK AL Birmingham K-99
.94.9 WPCH GA Atlanta Peach	99.5 WQYK FL St. Petersburg K-99
94.9 KFXD ID Nampa XD-FM	99.5 WKDQ KY Henderson Super-Q
94.9 KBIM NM Roswell FM-95	99.7 KFMH IA Muscatine 99+ Stereo
95.1 WINE CT Brookfield 95-INE	99.7 WMC TN Memphis FM-100
	99.9 KGOR NE Omaha 99-KG
95.1 WPXI SC Charleston Soul-95	
95.1 WLST WI Marinette FM-95	99.9 KISW WA Seattle FM-100
95.3 WCRM MI Clare FM-95	100.1 WLKI IN Angola FM-100
95.3 WLRQ MI Whitehall Super-Q	100.3 KIQQ LA Los Angeles K-100
95.5 KYNO CA Fresno Rock-96	100.3 KLIR CO Denver FM-100
95.5 KXKX CO Denver 96-KX	100.3 WDIZ FL Orlando Rock-100
95.5 WSGF GA Savannah FM-95	100.3 WLOO IL Chicago W-100
00	

4			22 (00110211000)	
FREQ	CALL	LO	CATION	NON-ID
100.3			Dearborn	FM-100
100.3				reo-Q-100
100.3	KMEZ	TX	Dallas	EZ-100
100.5			Durango	J-100
100.5	KJAK	OK	Oklahoma City	The Cat
100.7	KFMB		San Diego	B-100
100.7		CO	Pueblo	Z-100
	WHYI	FL	Ft. Lauderdale	
100.7	WBIZ		Eau Claire	Z-100
101.1	MMDC		Washington	DC-101
101.1		FL	Cocoa Beach Russellville	CK-101
101.1				KQ-101
101.3	KIOI	SC	San Francisco Sumter	K-101 Q-101
			Corvallis	K-12
101.5	KOXE	TX	Brownwood	Coax-101
102.1	WMBJ	IL	Brownwood Danville Co	ncept-102
102.1	WIOO	PA	Philadelphia	Q-102
102.1	KFWD	TX	Ft. Worth-Dalla	s FM-102
102.1	KLOZ	TX	El Paso	K-102
102.1			Richmond	XL-102
102.1	KYYS	MO	Kansas City	
102.3	WGUS	GA	Augusta	102-G
102.3	WQTC	WI	Two Rivers	15-Q
102.5	WQSR	FL	Sarasota Baton Rouge	Quad-102½
102.5	MEME	LA	Baton Rouge	FM-102
102.5	WEEN	IVI	Buffalo Seattle	Rock-102
102.7	KATC	OV	Oklahoma City	OK-102½
102.9	KUCB	TA	Cedar Rapids	K-103 Q-103
102.9	WZZO	MS	Jackson	Q-102
102.9	KIOZ		Laramie	K-102
103.1	WHKC	KY	Henderson	KC-103
103.1	WSTM	KY	St. Matthews	Disco-103
103.1	WWRW	WI	Wisconsin Rapid	ls W-103
103.3	KKTU	CA	Ukiah	K-2
	WVEE	GA	Atlanta	V-103
103.3	WTGI	LA	Hammond I	ove Radio
103.3	WYSL	NY	Buffalo Musicra Denver	dio-Y-103
103.5	KOAQ	CO	Denver	
103.5	WIIK			ire Radio
			San Diego Lake Charles	Z-104 Nova-104
103.7			Gadsden	Q-103
103.7			Little Rock	Rock-104
	KHEX	CA	Yuba City	FM-104
			Waterbury	W-104
104.1	WGLF	FL	Tallahassee	Quad-104
104.1			Allentown	W-104
104.1			Madison	Z-104
104.3			Baltimore	Q-104
104.3			Kansas City	Super-Q
104.3			Utica	KG-104
104.3			Bellingham Memphis	K-104
104.5	WQRK			Quad-104 Super-Q
104.7			Tampa	Q-105
104.7			Athens	Q-105
104.7	WBOC		Ocean City	FM-105
104.7			Fulton	FM-Rock
104.7	KVMT	CO	Vail	K-104
104.9	WHCG	GA	Metter	G-105
104.9	WWWY		Columbus	Tri-W-Y
104.9			Gahanna	FM-105
105.1			Orlando	BJ-105
105.1			Williamsport	Q-105
105.1			Providence Athens	JB-105
105.5	MAIQ	OII		Q-105

FREQ	CALL	LO	CATION	NON-ID
105.7	KXEL	IA	Waterloo	X-Rock
105.7	WWCT		Peoria	Kick-106
105.7	WWWM	OH	Cleveland	M-105
105.7	WQXA	PA	York	Q-106
105.9	WEZI	TN	Memphis	FM-106
106.1	KFRC	CA		K-106
106.1	WXYY	NC	Wilson	Y-106
106.1	KIOF	TX	Orange	K-106
106.1	KLAY	WA		K-106
106.3	WRCK	AL	Sheffield	106-Rock
106.3	WIOG	MI	Saginaw	W-106
106.5	WMAR	MD	Baltimore	FM-106
106.5	KOOI	TX	Jacksonville	K-1
106.5	WDLB	WI	Marshfield	FM-106
106.7	KLZ	CO	Denver	Z-107
106.7	WWWW	MI	Detroit	W-4
106.7	WWKS	PA	Beaver Falls	Kiss
107.1	WTAI	FL	Melbourne	Rock-107
107.1	KCCQ	IA	Ames	Q-107
107.1	WMQT	MI	Ishpeming	FM-107
107.3	WQLT	AL	Florence	Q-107
107.3	WMAL	DC	Washington	FM-107
107.3	WFAW	WI	Ft. Atkinson	FM-107
107.5	WSGH	NC	Winston-Salem	FM-107
107.7	KSWT	KS	Topeka	K-Sweet
107.7	WNCT	NC	Greenville	FM-107
107.9	KXOA	CA	Sacramento	K-108
107.9	WIRK	FL	W. Palm Beach	Country-K
107.9	WGMZ	MI		Stereo-108
107.9	KCIR	TX	Corsicana	K-108
	10.7	1		101111111

COMMENTS: This listing shows 212 non-IDers, as opposed to 31 in the June, 1975 listing and 72 in the April VUD. Clearly, the practice is quickly proliferating, spreading from big-city stations to rural areas--indeed, to locations with but one radio station. Hardest hit are these areas: Florida (the entire state, with non-IDers in almost every city), Colorado (again, the entire state, particularly the Denver/Pueblo/Colorado Springs/Vail area), California (along the coast from San Francisco to San Diego) and virtually every large metropolitan area, plus isolated cases in AL, GA, ND, etc. A few major markets have been saturated with non-IDers, among them Baltimore/Washington and Norfolk. As one station in a market begins the practice, it can be expected that a number of competitors will mimic the move; hence the idiocy in Colorado and other places. Few frequencies remain unplagued by these nuisances, making for DX problems when more than one station on the same frequency are using the same non-ID. In such cases, one must rely on musical formats and network affiliations, which can be found in the FM ATLAS. Corrections to this listing are welcomed at 5201 Colewood Drive, Pittsburgh, PA 15236. As always, your comments are welcomed.

13, Clarke

Ken Simon, 528 Pilgrim Road West Palm Beach, FL 33405 (305) 585-7415 Jan. 1977

This month's maps from KEITH HAMER of England cover television in RUMANIA and YUGOSLAVIA. If any WTFDAer is in Europe, Keith's phone number in Derby is 44 332 53399. I'm sure Keith would be glad to hear from any DXers.

ROGER BUNNEY's new book LONG DISTANCE TELEVISION is now available for about one pound ten pence postpaid (that's about \$2). It makes a great companion to Keith Hamer's book on worldwide test cards. Keith can order Roger's book if you want it. REMEMBER: F2 skip will soon be feasible on low band Europe stations. Anyone have any ideas on easy-to-build converters?

SCOTT CLARKE, director of engineering at the West Indies Television Network sends the following note via JOHN COMBS of Orlando:

"Our network's three transmitters are as follows: PJF-TV channel 3 on Saba, NWI; PJD-TV channel 7 on the Dutch side of St. Maarten; and ZBTV channel 5 on Tortola, British Virgin Islands."

PJF-TV channel 3 12.5 kw ERP antenna at 1,500 ft. ASL PJD-TV channel 7 0.1 kw ERP antenna at 1,100 ft. ASL ZBTV channel 5 15.0 kw ERP antenna at 1,300 ft. ASL

Normal hours for channels 3 and 7 are: Monday through Thursday, 1500-2300 AST, Friday 1500-0030, Saturday 1600-0030 and Sundays 0930-1330 and 1530-0000. All programming is in ENGLISH.

Sign-on and sign-off are preceded by color bars and tone tests. Logo at right is used at station breaks, usually with an island scene and voice-over announcement. The studio in Phillipsburg on St. Maarten feeds channel 3 via microwave and channel 7 via a UHF translator on channel 82!

Channel 5 is expected back on the air by mid-November after studio and transmitter work. Programs include Gomer Pyle, 700 Club, Sesame Street, Soul Train, Hogan's Heroes, Donahue, Perry Mason, Twilight Zone, Wrestling from Florida, and Sea Hunt. Church services are carried on Sundays and NFL football Mondays.



TV-3 IS ALIVE

These all appear within skip distance, except for channel 7. Bob Cooper can set his sights on channel 82, hi! The stations' address for all seeking QSLs is: West Indies Television Network, Television House, Phillipsburg, St. Maarten, Netherlands West Indies.

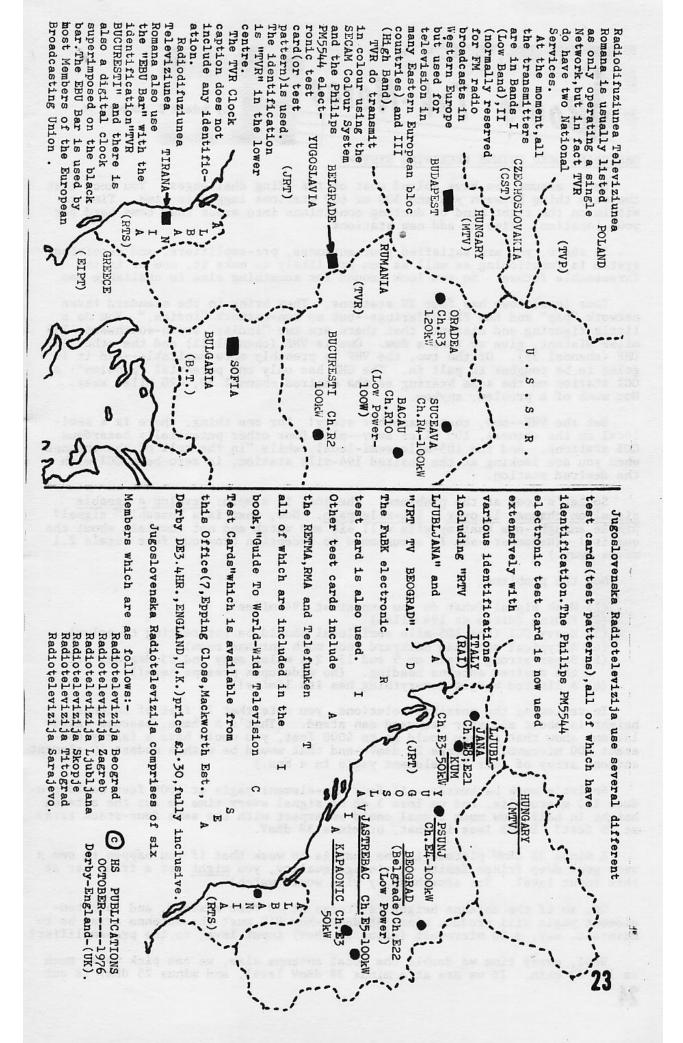
Had a visit in November from member RICHARD CLARK. He, his wife Esperanza and little Ricardito are now in the Dominican Republic at Puerto Plata on the north coast. He said he would forward DX reports from the new location.

NICK SHESTOPLE, a non-DXing stamp collector who is stationed in Ansbach, West Germany, says that most AFN (American Forces Network) stations are UHF, low-power, narrow-beam operations on armed forces bases. (Translators?) Several cable systems exist also. We hope to have an AFN schedule soon.

DOUG EVERITT, Western TV editor, has Europe on the mind. First it was Greece but a letter today says it might be northwestern Europe. He says he'll send information on local TV systems wherever he goes.

JOHN COMBS will soon have some simple music of the first couple of bars of major national anthems. If you've never heard La Bayamese, you might not know you're seeing Cuba. They won't be fancy since I don't read music...

73's for now. Keep those letters coming, and I hope you all had a happy holiday season and plenty of midwinter Es!



DESIGNING DEEP FRINGE RECEIVING SYSTEMS

Let's assume you have solved most of the DXing challenges. You know that the only thing between you and 500 or 600 stations logged is time. Time to sit in on the right kind of ducting conditions into areas that come hard for your location. Time to add new stations.

In short, you are satisfied your antennas, pre-amplifiers, and receiving system is functioning as well as you are likely to make it, now or in the foreseeable future. So you look around for something else to challenge you.

Your local town has four TV stations. They bring in the standard three network "pap" and the PBS offerings--but no non-network "indies." You do a little figuring and discover that there are two "indies" south-southwest: 194 miles distant, give or take a few. One is VHF (channel 11) and the other is UHF (channel 39). Of the two, the VHF is probably more desirable -- and it is going to be tougher to pull in. The UHF has only one potential "problem": a CCI station on the same bearing as the desired channel 39, 420 miles away. Not much of a problem, anyhow.

But the VHF--now, that's another story! For one thing, there is a semilocal on the channel, 105 miles away--plus four other potentially hazardous CCI stations. And the 105-mile semi-local, while "in the null of the antenna" when you are looking at the desired 194-mile station, is zero-beat CCI with the desired station.

So let's look at the problems. The goal is simple: develop a useable signal on channel 11 over a 194-mile path. Now, what is a "useable" signal? Simple enough -- one that my wife will sit and watch and not complain about the quality! (Remember -- she is accustomed to reception from our four locals 2.1 miles away.)

Now the problems:

(1) Weak signal (what do you expect at 194 miles?)

(2) Fading (ditto at 194 miles)
(3) Heavy CCI (the 105-mile semi-local should be interesting to solve)

(4) A typical suburban backyard (not much antenna room)

(5) Super-strong locals on 9 and 13, 2.1 miles away and 25 degrees off the desired antenna heading. (No wide-open preamps here!)

(6) A limited budget (everything has its limits!)

In reviewing the possible solutions, you note that 70 feet of antenna height is about all your backyard can stand. (That's a shame, beacuse calculations show that if you could go to 4000 feet, you would have a fairly constant 100 microvolts--minus 20 dBmV--and that would be with a modest 40-element antenna array of four ten-element yagis in a box.)

So let's work backwards. If four ten-element yagis at 4000 feet would produce 100 microvolts, and we lose 3 dB of signal every time we cut the antenna height in half, how much signal could we expect with the same four-stack array at 70 feet? 18 dB less is what, or minus 38 dBmV.

A minus 38 dBmV picture is one that is so weak that if you happen to own a very good deep fringe Zenith of vintage quality, you might get a frame bar at this input level. Not something my wife would watch!

OK, so if the antenna height is frozen at 70 feet maximum, and four tenelement yagis will produce minus 38 dBmV--how BIG must the antenna array be to maintain, say, a 50 microvolt (minus 25 dBmV) input level to the pre-amplifier?

Well, every time we double the total antenna size, we can pick up as much as 3.0 dB gain. If we are at a minus 38 dBmV level, and minus 25 dBmV is our BOB'S TEK-NOTES JANUARY 1977

goal, we have 13 dB to make up. So make it eight ten-element yagis, and we'll add up to 3 dB--now we are at minus 35 dB. Now go to sixteen ten-element yagis. and we are at minus 32 dB.

Hmmm--at this rate we will end up with 128 ten-element yagis to get our signal up to the minus 23 dBmV level (64 would be minus 26 dBmV). That is not only a lot of antennas, but the backyard is not big enough to hold them all. Not to speak of the budget (even super wholesale, Winegard model SCX-11 yagis aren't cheap!).

OK--time to do something tricky. If we put in two arrays of 16 ten-element yagis each (160 elements per array, 320 elements total) but space the two 160-element arrays apart for diversity reception, we may realize as much as 10 dB gain for the increase from 16 to 32 yagis. To get 10 dB diversity plus stacking gain, we will have to place the two 16-yagi arrays at least 20 wavelengths (at channel 11) apart, along a line that bisects at 90 degrees the true antenna heading between my receiving location and my distant channel 11. When all is working correctly, this will give me exactly minus 25 dBmV input. Not a great deal of safety margin in that, but my budget can better stand it.

Now each set of four yagis will be treated as a separate antenna system, with four sets of four making up one "bank" of antennas. All antennas are 75-ohm input (Winegard's SCX series is switch-selectable for either unbalanced 75-ohm--coax--or 300 ohm balanced--twinlead), so matching a set of four is as simple as using a 4-way hybrid splitter backwards, as a signal combiner.

When we add up the phasing line losses, however, we see that by the time we combine four fours together into sixteen, and then the two sixteens into 32 antennas, diversity-fed, even using .412 aluminum coax (very low loss) for phasing lines, we have nearly 2 dB phasing line loss!

Hmmm. That almost wipes out the extra antenna gain of the second set of sixteen yagis.

To compensate for this, each bank of sixteen antennas will have its own low-noise preamplifier. We could carry this even further and give each four-antenna sub-bank its own low-noise preamplifier, and we may before we get all done. This will give us back most of the loss in the phasing lines; at least enough to still make the second bank of 16 worthwhile.

Now the pre-amplifiers. Using the relatively new Siliconix U-310 j-fet, we know that a 1.0 dB noise figure 30 dB gain mast-mounted pre-amplifier for channel 11 is quite simple. A standard product, as it were, of advanced CATV engineering.

So allowing for feedline and phasing line combiner losses, we can reasonably expect minus 25 dBmV plus 30 dB of gain or plus 5 dBmV (1800 microvolts) at the input to the receiver down line. With 1.0 dB of down line loss, that is around 1500 microvolts delivered to the receiver.

Hmmm. So far, so good. A 50-microvolt signal (minimum expected 95% of the time) is adequate for good color, provided it goes into a very low-noise pre-amplifier. But, unfortunately, a signal that weak is very susceptible to the least little bit of degradation--such as co-channel interference. (And lots of other things too, such as cars, lawnmowers, and low-flying geese!)

The clean, simple pattern of a single ten-element yagis becomes more complicated when you stack additional yagis. The directional pattern of one runs into the directional pattern of the other(s), and patterns overlap, causing minor, new, unexpected (or unpredictable) lobes. To get rid of the 105-mile zero-beat CCI will require precise pattern control; achievable with a single bank of antennas, but made much more complicated when the array is a diversity array in which 16 yagis on one bank are separated by 20 wavelengths (60 feet or so) from the second bank. In wide open terrain, on top of a hill, you can control these factors quite nicely. In a suburban area with power lines, a church steeple or two and neighborhood rain gutter down spouts all messing up the "true ground," it is going to be quite a different matter.

Frank Aden, Jr. 1535 NW Ithaca Ave. Bend OR 97701 503-389-5488 Deadline: 10th

HAPPY NEWYEAR!

Doug Everitt, 1708 W. Maine, Enid OK 73701 (1976 UNIDS) Sun Nov 14 ES ch 2 1153 CST-- "APTN" Slide with 400 Hz tone. WDIQ? Yes it is, schedules show APTN stations sign on at 1200 CST (FEA).

Robert Williams, 251 6th Ave. East., Twin Falls ID 83301 (1976 UNIDS)
Mon May 17 ES ch 4 1920 MDT--In progress "On the Rocks" KDUH? KSNB? KNOP in at 1918. Schedules for KDUH & KSNB here are for June 5-11; "On the

Rocks" went off the air with this show (FEA).
4 1939 MDT--In progress "Wild Kingdom" KVOA? KNBC? KNBC, KRON, KVOA, Mon Jun 7 ES ch

KOB, KOA & KCRL are negative (FEA).
3 1940 MDT--"Concentration" KIII? KTVK? KEYT? KTVK checks; others negative (FEA). 2 2002 MDT--News in progress. KOAI? KOAI is negative; I would suspect ch

this may be an EDT station (FEA). 5 2000 MDT--End of "One Day at a Time". KENS? KENW in at 1959. KACB in 8 ES ch

at 2033. PTA: Texas CBS station. KENS checks (FEA).
4 1742 MDT--"Wild Kingdom" in progress. CHFD? CBWT-2? WTMJ? CKYB?
KXJB in at 1722, CBWFT in at 1800. WTMJ checks; others are Wed Jun 9 ES ch

negative (FEA).

3 1747 MDT-- "Beverly Hillbillies" CKOS? WJMN? WKZO? KDLO? KGLO?

PTA: SK, MI, SD, IA. All areas negative (FEA).
3 1945 MDT--"Concentration" CKCK in at 2028. PTA: SK, MI, MN, WI, SD, ch

IA. All areas are negative (FEA). 2 1320 MDT--Movie in progress with Karl Malden. UNID at 1320 with ad for "KING OPTICAL" on Felix St. Sat Jun 12 ES ch

Sun Jun 13 ES ch 3 1308 MDT--Program about Senior Citizens, exercise etc. KLNE? KENW? Both are negative (FEA).

2 1329 MDT--Wrestling, jiu-jitsu or judo. KQTV? KTEW? KTVI? KCKT? KTEW in at 1409. All stations are negative as with KPRC & KMID (FEA).

3 1333 MDT--Program similar to above. NBC station. KYTV? KARD? KMTV? All are negative as with KACB and KFDX; may be a program change from regular schedule (FEA).

3 1422 MDT--Movie with Humphrey Bogart. KYTV? KARD? KMTV? KTEW in at

1409, KGFE in at 1459. No schedules here for this date (FEA).
2 1630 MDT--"FBI" act III started. CKCK? KTEW? KQTV? KTVI? KCKT? CKPR? KGFE in at 1459, CBWT in at 1513, KTVY in at 1658. PTA: SK, MAN, ONT, OK, MO, KS, NE, IL, WI, ND, IN. Schedules for these areas are negative but many sports specials make it impossible to tell if any of the stations do run "FBI" at this time (FEA).

Sat Jun 26 ES ch 3 0927 MDT-- "Sesame Street" KENW? KINE? KFDX in at 1000. KENW runs it at 0800, KINE has it at 0600. TX stations are negative (FEA). 3 0933 MDT--"Mister Rogers Neighborhood" KENW? KINE? KENW checks;

KLNE is negative (FEA).

3 2114 MDT--Movie with Lucille Ball. KATC? WREC? WLBT? KFDX? KBTX? KIII? KTBS in at 2124. PTA: S. Cen. USA. Schedules not available here for this date (FEA).

Sun Jun 27 ES ch 4 1008 MDT--"Oral Roberts" KBTX in at 1059. PTA: TX, OK, ARK, TN. Stations in these areas and MO are negative (FEA).

3 1202 MDT--Movie with a Santa Claus in it (Mr. Kringle) then an offer where viewers could send for a Resurrection Plant. KFDX? KBTX? KTBS? KIII? KATC? KACB? PTA: TX LA. KDFW in at 1154.

3 1244 MDT--Movie with John Wayne. KTIV in at 1258. ch

4 1322 MDT--Golf in progress. Chris Schenkel MC. Promo for "SWAT" KDLO in at 1336. PTA: NE, SD, ND, SK, MAN. Probably not a regularly scheduled program (FEA).

Mon Jul 5 ES ch 2 1742 MDT--"Partridge Family" CKOS in at 1730. CKSA checks (FEA). Wed Jul 7 ES ch 3 2133 MDT--Movie with Ricardo Montalban. KMID in at 2105. PTA: NM, TX.

Wed Jul 21 ES ch 6 1349 MDT--Came show. PTA: KS, NE, OK. KOA in at 1335, KTVY in at 1358. KTVC, KOTV, WOWT all have "Match Game" at 1330 (FEA).

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Bill Feidt-8852 L Spiral Cut-Columbia, MD 21045
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David Rogers-Box 74-Buffalo, OK 73834
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Todd Schumann-2606 W. 105th St.-Chicago, IL 60655
Eric Schwarz-Sablons 57-CH 2000 Neuchatel, SWITZERLAND John Seay-1021 Englewood Ave.-Chattanooga, TN 37405 Richard Segalas-Box 26254-San Francisco, CA 94126 Ron Seman-1712 Sheridan Ave.-Whiting, IN 46394
Bob Seybold-Bennett Road, RD2-Dunkirk, NY 14048
James Shepherd-406 Harwood-Joliet, IL 60431
Marvin Shults-RR#1-Toulon, IL 61483
Craig Shura-19 Appelby Drive-St. Catherines, ON L2M 3E5
Ken Simon-528 Pilgrim, Apt. 2-West Palm Beach, FL 33405
Craig Simons-413 Ridelle Ave.-Toronto, ON M6B 1K3
Peter Skinner-24 Elbridge St.-Worcester, MA 01609
Andrew Smith-4309 Hamilton St.-Hyattsville, MD 20781
Dennis P. Smith-50 Manzanita Way-Paradise, CA 95969
Edward Smith, Jr.-119B Winrow, NBU 34D-Fort Huachuca, AZ 85613
Jeff Smith-603 Glendale-Liberty, MO 64068
Joseph Smith, Jr.-196 Ackley Ave.-Johnson City, NY 13790
Lexington Smith-55 East End Ave., Apt. 4G-New York, NY 10028
Winston Smith-4 Rifle Road-Kingston 2, JAMAICA
Jim Sokol-1319 Spruce St.-Reading, PA 19602
Darryl Sopata-23701 Panama-Warren, MI 48091
Steve Sprachman-3939 Eve Drive-Seaford, NY 11783
Richard Steinberger-47 Causeway St.-Hudson, MA 01749
Don Storms-3475 Spring Valley Blvd.-College Park, GA 30349
Eric Strahan-Route 1-Poplarville, MS 39470
Ralph Strobel-2510 E. McGalliard Road-Muncie, IN 47303
R.W. Strong-3398 Mark Ave.-Windsor, ON N9E 2X1
James Sullivan-1212 Violeta Drive-Alhambra, CA 91801
Karl Swartz-633 S. Hough-Barrington, IL 60010
Michael Sweeney-4 Prescott Ave.-Dix Hills, NY 11746
Verrell Tallet-2501 College St.-Plainview, TX 79072
Peter V. Taylor-KFOG-900 North Point-San Francisco, CA 94109
Michael Telles-352 "A" Avenue-Coronado, CA 92118
Martin Theil-12 Princeton Drive E.-Holiday, FL 33589
James Thomas-Box 454-Tipton, MO 65081
William Thompson-1907 Seneca St.-Buffalo, NY 14210
Richard Tidberg-Box 119A, Rt. 2-Winnebago, IL 61088
Paul Traska-64 Weaver Ave.-Buffalo, NY 14206
Roy Tucker-14109 Whiterock Ave.-La Mirada, CA 90638
Don Voegele-45 Alisal Road-Santa Barbara, CA 93103
Larry Vogt-7724 Harwood Place-Springfield, VA 22152
Lee Vulgamott-Box 177-Williams, IA 50271
Tony Ward-RR4-Guelph, ON NlH 6J1
Paul Wardell-2104 S.E. 28th Place-Portland, OR 97214
Larry Weil-14 Thixton Ave.-East Rockaway, NY 11518
Mal Wessot-Chatham Antenna Services-51 Austerlitz St.-Chatham, NY 12037
Steven West-432 Kenmore Road-Havertown, PA 19083
Frank Wheeler-6589 Wattsburg Road-Erie, PA 16509
Jim White-1000 S. Grand Ave.-Waukesha, WI 53186
John Wierhasz-106 Genevieve St.-Mauston, WI 53948
Morgan Williams-3798 Sunset Blvd.-West Columbia, SC 29169
Robert J. Williams-251 6th Ave. E.-Twin Falls, ID 83301
Mel Wilson-17 Van Cortland Drive-Pittsford, NY 14534
Michael Wimer-1939 Morris St.-New Castle, PA 16101
Ron Wing-705 N. Emporia, Apt. 2-Wichita, KS 67214
Bruce Winkelman-3324 Kettering Place-Greensboro, NC 27410
John Winslow-1106 Shasta Drive-Madison, WI 53704
Roger Winsor-P.O. Box 463-Hobart, IN 46342
Steven Wiseblood-707 Loma Way-Santa Maria, CA 93454
Dr. Richard E. Wood-15 Garden Circle-Syosset, NY 11791
Harvey Woodworth, Jr.-142 Otsego Ave.-San Francisco, CA 94112
Mike Worst-P.O. Box 21462-Seattle, WA 98111
David M. Wurl-Box 426-Wisconsin Dells, WI 53965
Thomas Yeazell-930 Seibel Lane-Cincinnati, OH 45238
 Thomas Yingling-221 Pinewood Road-Dundalk, MD 21222
Bob Young-1502 W. Broadway-Enid, OK 73701
Jim Young-Box 576-Wrightwood, CA 92397
 Robert Zent-1835 Fruit St.-Huntington, IN 46750
 John Zondlo-6617 Maryland-Hammond, IN 46323
 WTFDA: 304 members
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106 & 107 MHZ FM DX RECORDS

STATISTICS

Glenn Hauser, editor
EW EDITOR: Andy Bolin
709 Lincoln Ave
Charleston IL 61920

Total I					
MHz	Prop_	_Call	Lucation	Miles _	Dier. Location
106.1	Es	CJOY	ON Guelph	1415	Glenn Hauser. Von Ormy TX
	Tr	KDNT	TX Denton	935	Mike Dalton Clearwater FL
	MS				
	Au	KDNT	TX Denton	655	Andy Bolin Charleston IL
106.3	Es	WVIP	NY Mount Kisco	1335	Glenn Hauser. Enid OK
	Tr	KPAN	TX Hereford	1250	Mike Dalton, Clearwater FL
	MS				
	Αu	KAMO	WY Cheyenne	940	Russ Brown, Saint Joseph MI
106.5	Es	WADV	NY Buffalo	1440	Glenn Hauser Von Ormy TX
	Tr	WFML	IN Washington	975	Fred MCJormack, Des Lacs ND
	MS	WSTP	NC Salisbury	965	Glenn Hauser, Enid OK
	Au	WKBV	IN Richmond	545	John Ebeling, Bloomington MN
106.7	Es	WPDC	PA Elizabethtown	1350	Fred McCormack, Des Lacs ND
	Tr	WYEN	IL Des Plaines	790	Fred MCCormack, Des Lacs ND
	MS	WWWW	MI Detroit	885	Glenn Hauser, Enid OK
	Au	WDTM	MI Detroit	535	John Ebeling, Bloomington MN
106.9	Es	KMPX	CA San Francisco	1340	Glenn Hauser, Enid OK
	Tr	KNRO	TX Conroe	1070	Carlon Howington, Uniontown OH
	MS			1010	Garron Howard Booth, Ontonioum on
	Au	KROC	MN Rochester	525	Fred MCCormack, Des Lacs ND
107.1	Es	WGRP	PA Greenville	1320	Glenn Hauser, Von Ormy TX
	Tr	KASI	IA Ames	630	Carlon Howington, Uniontown OH
	MS	KDUZ	MN Hutchinson	620	Glenn Hauser, Stillwater OK
	Au				
107.3	Es	WHYD	GA Columbus	1395	Fred MCCormack, Des Lacs ND
-0,00	Tr	WANS	SC Anderson	1000	Glenn Hauser, Von Ormy TX
	MS	WWBA	FL Saint Petersburg	1085	Peter Sawatzky, Waterloo ON
	Au	WEOL	OH Elyria	610	John Ebeling, Bloomington MN
107.5	Es	WBYO	PA Boyertown	1500	
101.)	Tr	WBOW	IN Terre Haute	660	Glenn Hauser. Von Ormy TX Richard Wood, Baton Rouge LA
	MS	WTRF	WV Wheeling	915	Glenn Hauser, Stillwater OK
	Au	WCCN	WI Neillsville	580	Fred McCormack, Des Lacs ND
100.0	177-	MDTH	WV Wath 01 - 2 4	and the second second	
107.7	Es Tr	WBIV	NY Wethersfield NC Greenville	1450	Pat Dyer, San Antonio TX
	MS	KWIC	TX Beaumont	835 1185	Ron LeBlanc, Marrero LA
	Au	KICD	IA Spencer	470	Peter Sawatzky, Waterloo ON Fred McCormack, Des Lacs ND
	1700000	1 5000000000000000000000000000000000000			
107.9	Es	"CBJE"	PQ Chicoutimi	1415	Fred MCCormack, Des Lacs ND
	Tr	WIRK	FL West Palm Beach	1150	Glenn Hauser, Von Ormy TX
	MS	WBT	NC Charlotte	950	Glenn Hauser, Enid OK
	Au	WOBT	WI Rhinelander	600	Fred MCCormack Des Lacs ND

And so concludes my WTFDA editorship, which began shortly after the club was born. I've enjoyed keeping track of this data, and have done my best to be fair when there were conflicting claims or unconvincing records. All the best to all who have contributed to these columns over the years: Reports containing still unpublished data have been forwarded to Andy Bolin, whom I hope you will give your full support. Until the next, 73.

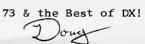
WESTERN TV DX (continued from page 15)

January 1977

To update past Es charts: add one reporter on July 31; August 01,02,03,04,05,15; September 02,17. July 31 includes possible ch.7 MUF. For aurora: September 02, thru ch.4.

Date Oct $\frac{20}{1}$ $\frac{21}{2}$ $\frac{22}{1}$ $\frac{23}{1}$ $\frac{26}{1}$ $\frac{31}{1}$ (AE?) Nov $\frac{01}{2}$ $\frac{08}{1}$ $\frac{14}{1}$ $\frac{17}{2}$ $\frac{19}{1}$ $\frac{22}{3}$ $\frac{23}{2}$ $\frac{24}{2}$ $\frac{25}{1}$ $\frac{27}{1}$ MUF at least 4 5 3 2 2 3 4 2 4 98.5 2 2 4 4 6 3

Reminders: Before mailing your report, clear it of all spurious unIDs; the tentatives are okay. Mail all reports to the new address; 1710 W Maine, Enid OK 73701. If you're a new member, or an old but quiet one, don't hesitate to report your DX, no matter how meager; we'll be glad to hear from you! Hope everybody enjoyed the holidays, and DX is looking up at your QTH...



QSL CORNER

Thomas J. Yingling, jr. 221 Pinewood Road Baltimore, MD 21222 Deadline: 10th

Can	ada	Ontario	CJRT 90.1 Toronto, 279 Victoria St. Toronto, ONT M5B lWl, Form letter with typed added note: you are the most southern listener. Wayne Jolly, Station Eng. reply in 1 week. (KRS)
IN	WBC	L 90.3	Fort Wayne, 1025 W. Rudisill Blvd, 46807, letter from Mike Heuberger, station manager, reply in i week. (KRS)
MI	WNM	90.1	
	WKJ:	F 92.9	Cadillac, Box 627, 49601, letter from Lowell Shore, CE, with mention of other reception report from Dalton Boys (Clearwater, FL) WTFDA member, reply in 10 days. (KRS)
MO	KRX	94.5	Kirksville, KIRX Bldb., 63501, letter & map from Bill Collins, CE (RTE)
	KWM	J 90.7	St. Louis, 8001 Natural Bridge Rd., 63121, letter from Cecil Jackson, CE
	KLP	V 101.7	Union, Box 549, 63084, letter from CE, no signer. (RTE)
	KTT	94.7	Springfield, P.O.Box 1806, 65805, letter, map, & decals from Gene Pitts CE in 20 days. (RTE)
NE	KGO	99.9	
ОН	WEE	100.7	Springfield, 2348 Troy Rd, 45504, letter & map per follow-up report from David S. Bastress, CE (RTE)
OK	KMOI	97.5	Tulsa, 2805 E. Skelly Dr, 74105, letter per follow-up report from Robert E. Cauthon, CE. (RTE)
PA	KDKA	92.9	Pittsburgh, 1 Gateway Center, 15222, unsigned fill-in am/fm card no notation as to which. Reply in 15 days. (KRS)
TN	WQUI	104.5	Memphis, Box 12045, 39112, letter signed by CE & PD. (RTE)
	WKIF	104.1	Jackson, % Radio WTJS, Box 1119, 38301, letter from Mark A. ward, PD. (RTE)
	WHIN	104.5	
	WTPF		Paris, P.O.Box 700, 38242, letter & map from CE, no signer. (RTE)
TX	KRLY		Houston, 3935 Westheimer, suite 94, 77027, letter & 4 KRLY bumper-
		and assi	stickers with logo KRLY FM 94, reply in 15 days from Bill Cornell, GE (SS)
VA	WGN	97.3	Newport News, Box 98, 23607, letter & map from Joseph W. Looper. (RTE)
WV	WKWK	San	Wheeling, 1201 Main St., 26003, letter from Jack Rees, CE. (RTE)
WI	WIFC		Wassau, 1114 Grant Ave., 55401, reply with wIFC/wSAU/wSAU-TV card with FM marked. Signed by Don Cordart (?) CE. Reply in 1 week. (KRS)
	WBKV	92.5	West Bend, Very friendly letter "Yours is a record for out station we
			have never heard from so far before" also thanked me for info on club WTFDA, Signed Paul E. Krejci, CE. Reply in 3 weeks. (KRS)

Reporters are Richard T. Eddie of St. Louis, MO, Kenneth R. Simon of West Palm Beach, FL & Scott Sampson of Orion, IL. I hope everybody read last month issue of the news of a new QSL Corner. From now on there is one column for all QSL's, and this is it. Please send all qsl news to the above address. Now that there is only one column, I will need all the support I can get so I can type up every month a full page of qsl items. Right now my electric typewriter is broken, and I have to bang-a-way on this manual in the mean while. I did get my Channel Master Probe-9 fm yagi up over the Thanksgiving weekend with a CDE rotor AR-33, which works just great on my Pioneer TX-9100 at 50 feet. 73's for now, from

CANADIAN CONFUSION...



No, that photo to left isn't a shot of WTEN-10 in Albany, though their logo and call letters are shown to right. Neither is it a picture of WCDC-19, Adams, Mass., which is licensed to repeat WTEN. Rather, it is a photo of the Canadian TV Ontario network repeating WCDC-19 as photoed by Paul Gaines on the evening of August 22. It's just another in a series of idiocies encountered by TVO due to their off-air receiving system. With TVO stations on channels 18, 19, 24, 28, 32, and 59 (all using CICO call letters), we can only warn DXers of the confusion! -CW INGRAM

BUILT-IN TV-DX RECORDS

Compiled by John F. Combs

Response to my artice in the October 1976 VUD (p. 47) wasn't exactly what one would term "overwhelming". Besides myself, I received reports from Harry J. Hayes, Scott Levitt, Pete Sawatzky, and new member Bob Young (forwarded by Doug Everitt). Below are listed the "all-time" built-in TV-DX catches, as well as the best catch on each channel.

```
LO-BAND VHF RECORD: WWAY-3 425 mi. John F. Combs, Orlando FL
      HI-BAND VHF RECORD: WETW-13 410 mi. John F. Combs, Orlando FL
                             WAAY-31 525 mi. John E. Combs, Orlando FL
W46AB 165 mi. John F. Combs, Oberlin OH
      UHF RECORD:
      UHF XLTR RECORD:
Ch. Calls Location Miles DXer, Location 2 KDKA Pittsburgh PA 230 Harry J. Hayes, Gouldsboro PA 3 WWAY Wilmington NC 425 John F. Combs, Orlando FL
               Wilmington NC
                                           425
365
355
               Milwaukee WI
                                                  Peter Sawatzky, Waterloo ONT
                                                  Peter Sawatzky, Waterloo ONT
               Plattsburgh NY
               Indianapolis IN
                                                  Peter Sawatzky, Waterloo ONT
Scott Levitt, S. Plainfield NJ
Scott Levitt, S. Plainfield NJ
                                           380
380
      WRTV
 7
      WITN
               Washington NC
      WXEX
               Richmond VA
                                           260
 9
               Steubenville OH
                                           255
                                           255 Harry J. Hayes, Gouldsboro PA
280 Scott Levitt, S. Plainfield NJ
      WSTV
10
      WAVY
               Portsmouth VA
                                           255
11
      WBKB
              Alpena MI
                                                  John F. Combs, Oberlin OH
12
      WWBT
              Richmond VA
                                        260 Scott Levitt, &. Plainfield NJ
13
      WBTW
               Florence SC
                                           410
                                                  John F. Combs, Orlando FL
                               320
WV 295
340
14
      WEBA
               Allandale SC
                                                  John F. Combs, Orlando FL
                                                  Peter Sawatzky, Waterloo ONT
John F. Combs, Oberlin OH
John F. Combs, Oberlin OH
15
      WTAP
               Parkersburg WV
               Scranton PA
Buffalo NY
16
      WNEP
                                           290
17
      WNED
               Lexington KY
                                           430
                                                  Peter Sawatzky, Waterloo ONT John F. Combs, Orlando FL
18
      WLEX
               Columbia SC
19
      WNOK
                                           390
                                                  Peter Sawatzky, Waterloo ONT
John F. Combs, Oberlin OH
20
      WUTR
               Utica NY
                                           260
22
      WDAU
               Scranton PA
                                           340
                                    205
                                                  Peter Sawatzky, Waterloo ONT
Peter Sawatzky, Waterloo ONT
John F. Combs, Orlande FL
23
               E. Lansing MI
      WKAR
               Syracuse NY 215
Columbia:SC 380
Lexington KY 430
24
      WCNY
25
      WOLO
                                                  Peter Sawatzky, Waterloo ONT
Bob Young, Enid OK
      WKYT
28
      KMCC
               Lubbock TX
                                     280
               Greenville SC
                                   450
29
      WNTV
                                                  John F. Combs, Orlando FL
                                    525
410
31
      WAAY
               Huntsville AL
                                                  John F. Combs, Orlando FL
33
      WJPM
               Florence SC
                                                  John F. Combs, Orlando FL
                                     275
385
34
               Columbus OH
                                                  Peter Sawatzky, Waterloo ONT
John F. Combs, Orlando FL
      WOSU
35
36
               Columbia SC
      WRLK
                                           385
                                                  Peter Sawatzky, Waterloo ONT
John F. Combs, Orlando FL
      WENY
               Elmira NY
                                           210
38
      WYEA
                                           340
               Columbus GA
                                                  Peter Sawatzky, Waterloo Ome
John F. Combs, Orlando FL
               Binghamton NY
                                           245
40
      WICZ
      WCWB
                                           320
41
               Macon GA
44
      WSNS
               Chicago IL
                                           245
                                                  John F. Combs, Monroe OH
                                                  Peter Sawatzky, Waterloo ONT
John F. Combs, Monroe OH
46
      WSKG
               Binghamton NY
                                           245
      WKBD
               Detroit MI
50
                                           220
      WPGH
               Pittsburgh PA
                                           215
                                                  Peter Sawatzky, Waterloo ONT
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Pete and I seem to have dominated the list; rest assured, it wasn't intentional!! I believe the five DXers in the above list have simply done a lot more DXing on built-in antennas than others; hence the paucity of reports. Note that we still need records on Chs. 21,26,30,32,39,42,43,45,46,47,48,49,51,52,and 54-83. Any catch over 200 miles is elegible. Also, if you have any catches that exceed the distance in one of the records above, please send it in. If interest warrants it, I hope to run an updater in several months.

Harry Hayes mentioned the possibility of doing something similar for builtin MS and Au. I know it's possible, and happens now and again. If anyone is interested in doing this, or in listing FM records, by all means, do so. I can't, for with the Southern TV-DX column, school, etc., my time is kind of limited. At any rate, send in those catches if you have them!! 73, John.



WINEGARD'S AC-4990, CONTINUED

Continuing our discussion of the Winegard AC-4990/Blonder-Tongue CMA-Ub UHF preamp controversy from last month (page 4, December VUD), we have these comments from Richard A. Rikoski, Ph.D, E.E., of the Illinois Institute of Technology:

I enjoyed reading R.B. Cooper's October 1976 TEK-NOTES on the Winegard UHF preamplifier and would like to expand upon some of the points made by Mr. Cooper in his fine article.

The central question one must consider before making an RF amplifier investment is simple: will adding a booster at the antenna improve reception? More properly: will the amplifier selected improve picture quality from TASO "passable" (signal/noise ratio for the system of 28 dB) upwards toward TASO "excellent" (S/N ratio of 44 dB)? (TASO is the Television Allocations Study Organization, which has established standards of picture quality for television -CWI)

It can be shown that, at UHF, adding a mast-mounted preamplifier with 3 dB noise figure and 15 dB gain to a system with 5 dB transmission line loss and UHF tuner noise figure of 14 dB will result in an overall S/N improvement of 15 dB. This should reduce snow considerably.

While it is true that the gain and noise figures of subsequent stages do affect system S/N ratio slightly, their overall effect on picture snow is usually negligible compared to the noise figure of the first electronic stage. Moreover, modern television receivers of good manufacture are designed to have abundant gain in the IF amplifier to being picture contrast up to any desired level.

Incidentally, noise received at the antenna (cosmic noise) is so low at UHF that any improvement in first-stage noise figure will result in an improvement in system S/N level. Unfortunately, this does not hold for the VHF bands, where cosmic noise level is high enough to mask any improvement in receiver electronics noise figure. Thus, the only reasons one would add a broadband VHF mast-mounted amplifier would be to compensate for very long and lossy transmission lines; for losses due to an extensive passive distribution system; or to compensate for low-gain circuitry found in a poorly-designed or malfunctioning television receiver.

Finally, it should be made clear that the term dBmV must be used with care, as it is defined only for signal level comparisons at 75 ohms, and should not be used for 300-ohm systems or for mixed 300-ohm/75-ohm installations.

Thank you, Dr. Rikoski, for your comments on this issue. Of course, DXers' primary interest is not specifically in picture quality (except perhaps on those 1000-mile UHF tropo ducting catches!), the subject of dB (discussed in last month's TEK-NOTES) applies and is equally important to both. Again, thanks for your observations, and comments from other WTFDA members on this matter or any other subject pertinent to the hobby are welcomed. Send them to your editor at 5201 Colewood Drive, Pittsburgh PA 15236, before the 20th of each month. Names will be withheld if so requested, but no anonymous letters will be published.

Another way to express your opinions to WTFDA staff members is by completing and returning your still-dormant Member Survey card (mailed with the July '76 VUD). Results will not be compiled until a majority (roughly 140) of cards are returned, so here's one chance to make your voice heard! At this writing, 27 more questionnaires are still needed. Will yours be one of them?

Clarke W. Ingram, Editor-In-Chief, VHF-UHF DIGEST

Out Orgen

WHF UTILITY DX

Pat Dyer 5315 Silvertip Drive San Antonio, TX 78228 Deadline: 10th of month

JANUARY 1977

```
Hank Holbrook, 7211 Chestnut St., Chevy Chase, MD 20015 QSLed, GMT
7-20: 2124, N77CS
                                119.7
                                           vic Bal. (Beckett Aviation Corp.; BAC 1-11,
                                           2-engine jet, 23-seat; 30 watts)
35 mi se Bal. (Supreme Petroleum; Piper
   23: 2003, N1954T
                                 119.7
                                          Cherokee 180, 1-engine, 4-seat)
Aberdeen, MD (Phillips AAF VOR; cw ID's; 45w)
vic NYC(Scott Paper Co.; Lockheed Jet Star,
 8-7: 0231, "PPM"
12: 1712, N472SP
                                108.4
                                128.7
                                           4-engine, 12-seat)
  13: 0154, KTA 453
14: 1920, N94758
19: 1659, N53540
22: 1635, N49DE
23: 1330, N59032
29: 1504, N1615W
    3: 0154, KTA 453
                                162.0
                                          Washington, DC(Marine Operator; 50 watts)
                                127.2 vic DC (Robert J. Taylor; Beech 35, 1-e,4-s)
                                124.0
                                          nr Upper Marlboro, MD(Andrews BollingAeroClub)
                                 128.6
                                           5 mi ne Westminister, MD(LakeAircraft, Inc; 25w)
                                          40 mi e Bal. (Charles A. DeLone, M.D.) & 119.7
12 mi ne Easton, MD(EDO-AIRE Corp.; Beech
                                128.3
                                134.5
                                          Baron E-55; 2-engine, 2-seat; 6 watts)
Ches.BayBr(S. Hardlo Cohen; PiperTwinComanche)
w of " (Cape Aircraft, Inc.; 50 watts)
ov Easton, MD(Thomas C. Lindsay; Mooney M20F
 9-4: 2116, N7925Y
                                119.7
    5: 0106, N4476P
                                119.7
   25: 2051, N7183V
                                127.2
                                           Executive; 1-engine, 4-seat)
```

Now, my loggings. Hammarlund SP-600-JX-10, Hallicrafters SX-62; Allied A-2586; two 30' long wires at 12' (ne-sw, nw-se runs); daily peak F2 MUF noted; * Es, bs-backscatter; GMT used

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11-11: 1614, KQC 877 * 19: 1515, 30.30 25: 1524, KQC 877 * 20: 1920, 32.96 29: 20: 20: 30.30 12: 1520, 30.30 21: 1615, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 30.30 12-8: 1550, 3
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KDN 407 35.22 Col Spgs, CO KFL 943 35.58 Las Vegas, NV KOE 257 35.22 Phoenix, AZ

KFL 943 is tone message-voice ID; OK City is voice message and ID the rest are tone message and ID

For a change, no earth-shaking news from WWV this time

Preliminary information from Boulder indicates that Cycle 20 may have finally hit its minimum in July 1976. However, the Swiss predicted numbers show no sign of an upswing thru early 1977.

With these low solar levels, about the only way the F2 MUF ventures far into the 30-50 MHz region is with the assistance of a magnetic storm. Such was the case on Dec 9 when the highest US MUF's since Oct 12-13 were noted. The transcontinental MUF might have come close to the 35-MHz pager pile. So, again, we ask that those members on either coast report any loggings of the other coast via F2 on VHF. Even tentative ID's are very useful these days of scarcity.

73, Pat

WASIYX

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