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From the Publisher ... The NRC lost a member, and I lost a good friend a month ago when Topeka DX'er Kurt Neunzig lost his battle with cancer. Kurt joined the NRC after the Topeka convention a decade or so ago and actively DX'ed and kept me abreast of the area DX scene through phone calls and conversations over hurried lunches at Topeka High, where he occasionally served as a substitute teacher after "retirement" from the military. He also was a collaborator on the CCRadio loop controller and head unit with variable termireview that appeared recently in DXN. Our prayers are with Kurt's wife and family.

sending out letters August 1 for September 15, 2000 dates, so it's time to start sending him stamps, targets and \$ for supplies. His address is P. O. Box the units and copy of the QST article on it for \$130, 15762 - Fort Wayne, IN 46885-5762.

NRC 2001 ... Ernie Wesolowski is still accepting bids for the 2001 convention, the location of which will be announced at NRC 2000. If you'd like to send Ernie a serious bid, forward it (by August 1) to him at 13312 Westwood Ln. - Omaha, stamp collectors. Wayne Gilbert - 10751 Routt ST-NE 68144-3543.

NRC 2000 ... Fred Vobbe is still developing activities for NRC 2000, just a couple of months away, and he warns prospective attendees to reserve their motel room early:

"The National Radio Club convention will be hosted by Fred Vobbe, Publisher of the DX Audio Service, wife Debbie, daughter Connie, son Jon, and adopted son Phil Wayne. :)

"The convention will be held at the Hampton Inn, located at 1933 Roschman Avenue, Lima OH 45804. (Intersection of I-75 and State Route 309). The hotel's phone number is 419-225-8300. (FAX 419-225-8328). To book your room call the Hampton Inn and tell them that you're with the National Radio Club and your CODE is "NRC". Room rate is \$69.00 per night, and there is a block of 24 rooms till August 19th, 2000. Rooms are blocked from 8/ 31/2000 to 9/4/2000. Due to several events in Lima, I urge you to book your rooms early! You can hold your room by credit card.

"Convention Registration is \$35.00 per person until August 19th. After August 19th, or if paid at

the convention, it is \$40.00. Convention registration includes all the beverages for the weekend, snacks, the N.R.C. Banquet. There will be a special picnic dinner from 5:00 - 7:00PM on Friday night sponsored by the editors of the DX Audio Service in the hospitality room. A continental breakfast is provided for Hampton hotel registrants in their spacious breakfast area every morning. They have over 28 items for your selection.

DXChange ... Dick Truax is offering a K9AY nation, built and tested by Al Merriman and same as those used in past two Newfoundland CPC ... Blaine Thompson says that he'll start DXpeditions. All you need is the wire and insulators to construct the loops and you're in business. (See article in this DXN for more info.) Will ship lower 48 states. Call 812-246-6377 after 6pm EDT weeknights or most anytime weekends, or email: <<k9rt@aol.com>> ... Wayne Heinen forwards this from a collector in his area: "I would like to contact Steinite radio Collectors or radio verification Broomfield, CO 80021 <<wagil@aol.com>>, 303-465-0883

DXN Publishing Schedule, Volume 67 Iss. Deadline Pub. Date Iss. Deadline Pub. Date

July 17 Sept. 8 29. Aug. 4 Aug. 14

DX Time Machine

From the pages of DX News:

50 years ago ... from the June 17, 1950 DXN: Alan Golden, Picton, Ont., offered the following advice about CHVC-1600, Niagara Falls: "Don't waste your paper and stamps on this station as they file your reports in the

25 years ago ... from the June 16, 1975 DXN: Ernie Wesolowski, Omaha, noted that a May 6 tornado destroyed what was the site of the 1959 NRC Convention, the Town House Motel, and for a time during the '60's and early '70's the home of KOWH/KOZN/KMEO-660.

10 years ago ... from the June 4, 1990 DXN: Dave Schmidt's first "Musings" column included 17 Musings stretching over six pages.

AM Switch

Jerry Starr w8jv@yahoo.com c/o WHOT Radio 4040 Simon Road

Youngstown, OH 44512-1320

Status changes in AM stations, supplied by the FCC and listeners

	- Min Sarrie prinda	v -4.22(.)	The state of the s	and the second s	900.00	1374 May 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	32*83
CALL L	CALL LETTER CHANGES						
	<u>Old call</u>			New call			
620	WKNI	ΑL	Lexington	WZNN			FCO
820	WZTM	FL	Largo	WMGG			
940	KXUX	OR	Bend	KICE*			A A A
950	WCNZ	WI	Sheboygan	WCLB			ΔW
1040	WSKE	PA	Everett	WZSK	:		
1060	WNRX	MS	Tupelo	WKMQ	ı		1
1190	WAJL	FL	Pine Castle	WIXL	•		i
1090	WKCV	TN	Kingsport	WHGG			100
1170	KVVS	CO	Windsor	KJJD			' 102
1230	KRSY	NM	Alamogordo	KREZ			
1230	WUBE	OH	Cincinnati	WDBZ			
1260	KGIL	CA	Beverly Hills	KJAZ			
1340	KFEZ	KS	Kansas City	KCKN		4	
1340	KJAZ	CA	Oroville	KEWE			32 N. Mission P.O. Box 159
1350	WGIA	GA	Blackshear	WXRB			Wenatchee, WA
1370	KAWW	AR	· · · · · · · · · · · · · · · · · ·	KOWS			98907
1460	KGMZ	HI	Honolulu	KRTR			
1480	WQKS	KY	Hopkinsville	WHVO			
1480	WSHP	PA	Shippensburg	WEEO			
1530	KLEC	AR	England	KROP			

*Note: KXUX-940 requested and was granted a change to KMGX and then had that change set aside in favor of KICE. We don't know if KMGX was ever used on the air.

APPLICATIONS / GRANTS FOR NEW STATIONS

None

APPLICATIONS FROM EXISTING FACILITIES

GRANTS TO EXISTING FACILITIES

580	KSAZ	AZ	Marana: 5000/550 U2
620	WTGH	SC	Cayce: relocate transmitter
910	WSUI	ΙA	Iowa City: 5000/4000 U2, relocate transmitter (see below)
1290	CHRM	PQ	Matane: to 105.3 FM
1470	WWBG	NC	Greensboro: 5000/5000 U4
1600	WQOP	FL	Atlantic Beach: relocate transmitter

2000			The second resource and second
OTHER	NESS		
540	WDAK	GA	Columbus: now operating with 5000/100 U1 while moving the night transmitter to the daytime site, formerly a two site operation
580	KJMJ	LA	Alexandria: silent station is ON THE AIR
648	WVUV	AS	Leone: silent station is ON THE AIR (for the IDXD crowd)
910	WSUI	IΑ	lowa City: now operating with 5000/1250 U1 while new three tower 5000/
			4000 U2 site is being built six miles south of the old site where two of the 1920 towers have fallen already
800	KREI	МО	Farmington: incorrectly shown as NM last month
1030	KCTA	TX	Corpus Christi: application for 50000/10000 U2 has been DENIED
1050	KBBV	CA	Big Bear Lake: silent station is ON THE AIR with an STA for 15 watts while
			the move to Loma Linda, CA takes place
1080	WSSI	MS	Carthage: silent station is ON THE AIR
1140	WCJW	NY	Warsaw: CP for 2500 D3 is on
1230	WMOU	NH	Berlin: station is SILENT

1230	WABN	VA	Abingdon: station is SILENT
1400	WBTB	NC	Beaufort: silent station is ON THE AIR relaying WNBR 94.1
1450	WDLK	AL	Dadeville: station is SILENT, will return "this summer"
1550	WKQV	PA	Pittston: silent station is ON THE AIR
1590	WDBL	TN	Springfield: station is SILENT

THANKS: El Charlton, Bill Hale, Ed "The Pipe" Krejny, Dave Schmidt, Wayne Heinen, Shawn Axelrod, Al Merriman, Pete Kemp, Dave Harris, Les Johnson, and MSJ WIMY & BKF

KIVA NM Albuquerque: CP to move here from 1580 kHz is on

73 and Good DX, Jerry Starr & Buffalo K. Foonman

1600

Longest Day of the Year DX Challenge Bruce Conti - 46 Ridgefield Drive Nashua NH 03062-1174

<<BAConti@aol.com>>

International DXer and antenna phasing unit designer Mark Connelly once said, "The DX season ends and begins on the longest day of the year." In other words, there's no such thing as the DX season. Much of the extended DX season is possible due to developments in antenna design and receiver technology. Yes, conditions may not be ideal. There is thunderstorm static to deal with, and the nights are shorter. However, the warm weather provides an opportunity to travel to quiet locations away from man-made noise. The boys of summer also keep the DX hobby alive for those who enjoy following their favorite baseball team as they travel to rival cities. Still others take their receivers to favorite vacation destinations for a unique DX experience. Mediumwave DXing has indeed become a year-round activity.

The First Annual Longest Day of the Year DX Challenge celebrates the close of the 1999-2000 DX season, and the start of the new season. You are invited to participate simply by DXing during the 24hour period of Wednesday, June 21, 2000, the first day of summer, and submitting the results. Your entry may be for the 24-hour period in UTC, EDT, or per your local time zone. Please indicate what time zone you are using for your logs. Each logging should include the time of reception and details of what was heard. Follow the DDXD or IDXD report formats. Domestic and international logs are weighted as follows:

Domestic (US and Canada) logs inside your time zone are worth 1 point each.

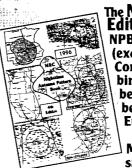
Domestic logs outside your time zone are worth 2 points each.

International (outside the US and Canada) logs are worth three points each.

Prizes will be awarded to contest winners from each time zone. The deadline for contest entry is July 1, 2000, so winners can be announced in the July 17 edition of DX News. All logs will be published in DX News, in a special Longest Day of the Year report. 73 and Good Luck!

How to place mail orders:

Write to NRC Publications - P. O. Box 164 - Mannsville, NY 13661-0164. Enclose check or money order; NY residents, please add state and local taxes. Please allow 3-6 weeks for shipping.



<u>The NRC Nighttime Antenna Pattern Book, 4th</u> Edition is the perfect mate to the NRC AM Log, as the NPB provides DX'ers with up-to-date maps of all (except Class IV) stations with nighttime operations. Convenient to use: 3-hole punched for standard binders. Only \$16.95 to U. S. and Canadian members; \$22.95 to U. S. and Canadian non-NRC members. Airmail to members: to Latin America. \$24.00: Europe, \$25.00; rest of the world: \$28.00.

Order from: NRC Publications - Box 164 Mannsville, NY 13661 (NY residents, please add sales tax)

West: Bill Hale phantom2@eaze.net

between East and 6124 Roaring Springs Drive - North Richland Hills, TX 76180-5552 Central time zones)

East: Michael Shaw thousandislands@mediaone.net

25 Trask Ct Apt 14 - Beverly MA 01915-5370

DX Catches in the U.S. and Canada, with 24-br. ELI

(Division line is

DDXD-West

- Here's a bit of station news gathered from various sources: WSUI-910 in Iowa City is erecting three new towers. Seems two of their old three-tower array folded a few months ago, as they'd been around since the station first went on the air in about 1920. They've been operating with an STA for U1 5000/1250 since the incident. They hope to be testing off the new array by the end of August and then regular programming on their new U2 5000/4000 set-up shortly thereafter. This per telephone call to CE Tom Spaight. Be listenin'! From the Chicago Tribune comes word that the Catholic Family Radio (CFR) network is in deep financial trouble. So, along comes Thomas Mongahan, mister deep pockets of Domino's Pizza fame. He's behind an effort to keep the Catholic talk programming on the air over WYPA-820 and WZER-540 (remember, this is from the Trib). There is also the possibility that CFR could be merged with Mother Angelica's Eternal Word Television Network's radio service. The frequency swap between KCLE-1120 and KJSA-1140 here in the Fort Worth area has been delayed to the end of August due to non-arrival of phasers. If you hear any station updates or any other format changes . . . be sure to let us know!
- Reporters' comments: "Not much to report. Conditions have been terrible. Oh well only 5 more months to winter!?!?!!?" - SA-MB
- Looks like the "Summertime Blues" are here. Although the interest is still there, poor warm-weather
 conditions are making that elusive signal stay close to home. Don't forget the Graveyard DX Achievements web site at http://www.angelfire.com/tx2/phantom2/index.html. Besides the complete
 GYDX listings, there is usually a pattern or two to peruse. See you next month. Deadline? Early on
 July 6. C U here?

REPORTERS

SA-MB	Shawn Axelrod Winnipeg Icom ICR-70 & Drake R8 + 4 Foot Unamplified Box Loop/
	Quantum Loop, 145' outdoor wire, 100' indoor wire, MFJ 1026 Phasing Unit
	<saxelrod@mb.sympatico.ca></saxelrod@mb.sympatico.ca>

- GH-KS Gary Houdek Munden digital Magnavox
- WH-CO Wayne Heinen Aurora Barefoot TRF 12-655 <nrclog@aol.com>
- GJ-CA Gary Jackson Sacramento FRG-8800 + Kiwa Loop
- BK-CA Bob Karchevski Sunnyvale R8-A/KlWA Loop <karchev@worldnet.att.net>
- JJR-WI John J. Rieger South Milwaukee FRG100, Kiwa loop, MFJ-959B tuner/preamp, DSP599zx Audio Noise Reduction Filter <iohntrieger@webtv.net>
- KR-AZ Kevin Redding Mesa Chrysler Model 4469088 car radio and 50" wire or 15' horizontal antenna; Sony SRF-M40 Walkman; GE SRIII model 7-2887A; Kenwood R-1000 and 100' wire <|wdxer@juno.com>
- DS-TN Doug Smith Pleasant View <w9wi@bellsouth.net>
- MS-MB Morris Sorensen Winnipeg Drake R8 + McKay-Dymek DA-9 ferrite loop
- Ed.-TX Editor North Richland Hills 1CF-2010 barefoot

540

STATION NEWS & NOTES

WDXN TN Clarksville - 5/6 1400 - Noted format change to Groovin' Oldies, via satellite.

- (DS-TN)

 1060 KLMO CO Longmont 5/29 1400 Still these calls, and now // KSKE-610 (still with that call) and KDMN-1450. Slogan is Radio Colorado. Format is TLK (ex: C&W // FM). Runs ABC News and so far TRN and Hamblin have been
- heard. (WH-CO)

 1650 KCNZ IA Cedar Falls 5/6 2223 Good signal, with new ID: The New 16-50 KCNZ The

 Talk Station. New call sign. NEW! (SA-MB)

		,	
1660	KAXW	CA Merced - Reported as on, but have been listening here off and on from May	[,] 1.
		Have heard nothing, not a peep! (AB-CA)	

UNIDs and UNID HELP

1570 UNID ?? -5/23 0021 - Station with poor signals, under CKMW, with ESPN sports programming. Ideas?? (SA-MB)

TIS & OTHER STUFF

- 530 TIS CA Fresno 5/13 1330 New Cal Trans facility testing, at 99 and Cedar, telling of their testing, in EE and SS. Will be on the air soon with weather and traffic.

 Be sure to listen. (GI-CA)
- 530 TIS CA Various 5/19 New Cal Trans stations are testing at: Prather (CA 182 and Lodge Road); Fraint (Highways 41 and 145); Traver City (US 99 at Merritt Ave); Fairmead City (US 99 and CA 152). (GJ-CA)
- 1610 TIS CA Fort Bragg 5/20 0800 New TIS testing. Weak here. (GI-CA)

REGULAR LOGGINGS

- 710 KDIS CA Los Angeles 5/14 0230 Playing Devoted To You on Radio Disney. In C-QUAM stereo; pilot light lit. (KR-AZ)
- 860 KOSE AR Wilson 5/16 0538 Fair, in fade up, with GOS. 21 watts! (JJR-WI)
- 860 WGUL FL Dunedin 5/16 0536 Poor, with AM, FM and AM 930 IDs. MoYL format.
 (IJR-WI)
- 880 KCMX OR Phoenix 5/21 0756 Business talk program, Business Talk Radio slogan, KCMX ID and Ai News at 0800. (AB-CA)
- 900 KDIL? CA Fresno 4/14 1315 Is this a call change? Should it be KBIF? Hard to hear through KNEW-910 slop and local buzz. (BK-CA) [Chances are you heard "KBIF", which is phonetically alike to KDIL. AMS and the FCC show no change Ed.]
- 970 KESP CA Modesto 4/19 1228-1231 Call change from KANM. When? [See AMS in Issue 24 Ed.] Sports talk show, VID: KESP Modesto-Stockton. (BK-CA)
- 980 KCTY CA Salinas 4/19 1350-1401 VID: KCTY Salinas Monterey a Spanish Media Station. Spanish programming. (BK-CA)
- 990 KTKT AZ Tucson 5/20 0715 With CNN Headline News and Sports, followed by local ad drop-ins with several KTKT mentions, including a promo for the <u>Indianapolis 500</u>. Must have been on daytime power/pattern early . . . or all night? Second time heard. [Ed.-TX]
- 1010 KCHJ CA Delano 5/30 0734 With ID followed by Mexipop music. Deep fades. (AB-CA)

CFRB·AM·IOIO

- 1030 KCTA TX Corpus Christi 5/23 0530 ID, then Family Life program. Good signal. (GH-
- 1070 CHOK ON Sarnia 5/14 0330 Fair, in WTSO null, with jingle and oldies. (JJR-WI)
- 1090 WMUS MI Muskegon 5/14 0325 Poor, with After Midnight Weekend, ads, 107 MUS ingle. Strong. (IJR-WI)
- 1110 KFAB NE Omaha 5/21 2353 With a talk show with an guy who had an English accent. The pilot light was lighting on and off. (KR-AZ)
- 1190 KLUV TX Dallas 5/18 0350 ID as Smokin' Oldies, KLUV Dallas-Fort Worth, then more rock music. (GH-KS) [Watch for a call letter and format change shortly Ed.]
- 1210 KUNF UT Washington 5/31 0854 Playing Fire and Rain by James Taylor. Usually hear KGTL on this frequency, but time change for the rest of the nation helps get this one like a local in the morning. (KR-AZ)
- 1210 KGYN OK Guymon 5/21 2355 Pilot light on; full C-QUAM stereo. Playing Crime of Passion by Eddie Rabbitt. (KR-AZ)
- 1220 KBZS CA Palo Alto 5/4 1200 With business news. (BK-CA)
- 1230 KWGt CA Stockton 5/4 1215-1220 Religious preaching. Didn't wait for legal ID, so KWG is tentative. But L&C, so who else? (BK-CA)
- 1240 KNRY CA Monterey 5/4 1231 Business news/talk VID: AM 5-40 KIEZ. Confusing. Followed by ad that referred to KNRY/KIEZ. (BK-CA)

6								
1240	WOBT	WI	Rhinelander - 5/14 0600 - Poor, but very clear W-O-B-T heard. Super-rare here. (JJR-WI)					
1280	KUYL	CA	Stockton - 5/4 1236-1302 - Ex: KJAX. L&C, with VID: Stockton's New Cool 12-80. Slogan is Cool 12-80. Programming Rock 'n' Roll Oldies. (BK-CA)					
1380	KBWD	TX	Erownwood - 5/31 0710 - Poor, but distinctive end of ABC News with Doug Limerick ending, then Mike Sloan (or Stone) is wanted in the KBWD studios into The Devil Went Down To Georgia by Charlie Daniels. Fade-out into oblivion. Becoming an early morning regular. [EdTX]					
1450	KNOT	ΑZ	Prescott - 5/24 0805 - With the 6	end of local news, into <i>Shangri La</i> a sh from KSLX-1440 which had no				
1450	CHUC	ON	Cobourg - 5/22 0305 - End of ne frequency this morning. (JJR-V	ws, into <i>Car Wash</i> by <u>Rose Royce</u> . VI)	On top of			
1460	KMWX	WA		ID, then playing Time of the Season	on. New.			
1480	KYOS	CA		Merced - 5/10 0832 - With ID: This is Merced County's News-Talk, KYOS. Heard in a very tight KPHX null. New. (KR-AZ)				
1480	WHBC	ОН	Canton - 4/29 2200 - Fair, with local and national news, ads and weather. IDs as 1480 WHBC and WHBC, Canton. (MS-MB)					
1490	WLFN	WI	La Crosse - 5/30 0305 - Poor, with end of CNN News, jingle, weather and NOS. (JJR-WI)					
1500	KSJX	CA		nknown Asian language, but givi i in San Jose. Assume these to be a				
1530	KGBT	TX	Harlingen - 5/8 2333 - With SS ads for places in McAllen and ad for a program Mujer a Mujer (woman to woman. IDs as La Primera. New. (KR-AZ)					
1540	WPTR	NY	Albany - 5/23 0040 - NOS or adult standards music, with poor signals under KXEL. New calls. (SA-MB) [Call is back from the dead :-) - Ed.]					
1570	KYCR	MN		ar ID on the hour. Under CKMW.	(SA-MB)			
			GRAVEYARD DX U	Quinte broadcasting compa	-			
1400 kHz				P.O. Box 488, 10 South Front Stree Belleville, ON K8N 5B2	Miles			
KTNT	-	Tacor	na Eric Floden	Burnaby, BC	143			
			DDXD-Eas	st				
A while back, there was plenty of discussion on the listserv about weather systems and how they may affect listening conditions. The spring weather we've been having here on the North Shore of Massachusetts, however, seems to have somewhat blown the theory that rainy, foggy or otherwise-miserable conditions favor DXing. We've had more than our share of low-pressure systems in the past								

several weeks, and I have not been able to log a single new station. Or does that theory only apply to the traditional DX season?

New for this column is a minor change to the UNID heading to include presumed stations, placed there as a kind of "purgatory" until we're sure about them. You'll also note the entry for 1620 WTAW/ KAZW. Anyone have a solid logging for this one?

Did you roll tape (or MP3 or CDRW) on 770 WABC's nostalgia day? ABC Rewind 2000 was incredible! If you haven't heard, WABC programmed a full day of airchecks, broken up by a baseball game, that brought back a lot of memories for many of us. Word of this broadcast came between issues of DXN, so there was no chance to give you a notice in the last column. You'll see my entry below, and I suspect that the next issue will feature quite a few more loggings. Normally we don't log the powerhouse stations, but then, this was an extraordinary day! Thank you, WABC.

STATION NEWS

640	WMFN	MI Zeeland – 5/22 – Still carries BNN Business News daytimes, but late evenings and overnights switches to sister station WMJH-810's NOS format from WestWoodOne (WMJH is daytime-only). Slogan is "Night Magic" during // times. (PLB-MI)
1120	UNID	UNID, UNID HELP & PRESUMED

			JRN affiliate anymore, but it wasn't WestWoodOne or ABC (1480 WISL/1620 WHLY). I'd feel better about this if someone could tell me if WBZR has NOS or talk at this time, and if NOS, which network? Someone reported in the Formats column the simulcasted WFSH is talk-only, so maybe NOS is gone. WKCE TN Maryville presumed. (SK-PA)
1150	UNID	_	4/26 0010-0026 - Urban Contemporary/soul/rap; poor under WNDE. WTMP FL Egypt Lake presumed. (DT-JWI)
1320	UNID	_	
1620	KAZW	TX	College Station – 3/29 0502-0618 – Art Bell Show, morning show with Bloomberg Money Show, and ID as "News and Sports 1150" with WTAW mentioned. Good; fade at 0618. (DT-JWI) [Log notes 1150 WTAW, also College Station, and lists KAZW as not on air yet. 6726 shows two loggings as 1620 WTAW. Both loggings in April, with (DB-DE) catching a partial ID as "20, WTAW". New //? – MS]
1700	UNID	_	3/31 1901-1934 - Network sports; poor under WAFN. KTDK TX Sherman presumed. (DT-JWI)
	******		LOGGINGS
550	WSVA		Harrisonburg - 4/30 1940 - Ad for Valley Meat Processors; weather; "NewsRadio 550" and ID. (WM-MD)
570	WDTF	NC	Raleigh – 5/27 0845 – Ex-WRDT. HealthLine program extolling benefits of oregano. ID with slogan "Full Service Christian Radio". (RJ-NC)
620	WTRP	GA	La Grange – 3/01 2259 – Sports talk show; promo for morning show "on WTRP". Poor with UNID interference. (DT-JWI)
640	WGOC	TN	Blountville - 5/14 2305 - Canned ID "AM 640 WGOC" heard over CBS News. (WM-MD)
680	WISR	PA	Butler – 5/14 2118 – Ad for Madison Avenue Apartments in East Butler. Rose up over WINR. Very rare. (SK-PA)
720	WWII	PA	Shiremanstown – 5/20 2100 – Fair; religion in Spanish, "this is WWII Shiremanstown, Pennsylvania, aBroadcasting station," then gone leaving CHTN in clear. (BC-NH)
730	WPIT	PA	Pittsburgh – 5/03 2030 – Promo for station program; ID under SS. (WM-MD)
770	WABC	NY	New York City – 5/29 1943 – <i>ABC Rewind</i> 2000 heard (for most of the day; brief logging follows) with the legendary Roby Yonge "Paul is Dead" show: "77 WABC, New York-MusicPower" jingle; scoped live spot for (who else) Dennison Men's Clothier, Route 22, Union, New Jersey; speculation on clues from Beatles' song Glass Onion; song "And When I Die" from Blood, Sweat and Tears (not scoped); sung "WABC"; time check "14 before two o'clock"; mention of telephone calls from all over the country; time check "12 and a half before two; Roby Yonge here";
850	WODZ	PA	"Roby Yonge" shout, then change of jock to Les Marshak, who mentions Roby and states "it isn't true". Great signal for a change. (MS-MA) Johnstown – 5/17 0023 – End of Altoona Curve vs. Norwich Navigators baseball. Canned ID at 0029 "Oldies Radio 850, WODZ". Has WestWoodOne oldies, same as local 95.3. Last heard as WJAC. Despite distance, it's a rare one. (SK-PA)
890	WKNV	VA	Fairlawn – 5/04 2030 – "Today's Southern Gospel Music"; ID. (WM-MD)
920	WHJJ	RI	Providence – 4/29 2100 – Promo for upcoming show "Right here on NewsTalk 920"; ID. (WM-MD)
	WGHQ	NY	Kingston – $5/032005$ – ID with "Your station for talk and information". (WM-MD)
040	CKNX		Wingham – 5/03 2020 – C&W music heard; "Country 920"; ID. (WM-MD)
940	CINW		Montreal – 4/30 2120 – "You're listening to Newsradio 940"; report on Canadian parliament. (RJ-NC)
950	WEZO	NY	Rochester – 5/01 1950 – SS ad for event at the Gotham City Music Center. + 5/02 1945 – Canned ID in English (for the old format) over SS

music. (SK-PA)

THO BOX 122 GREAT ORGANIA PUTERBOROUGH, ONFARIO KNEGYR

- WTCL FL Chattahoochee 4/29 0620 Clear ID followed by UC or B-GOS music. Good 1580 signal. (RJ-NC) 1600 WMCR NY Oneida - 4/26 1839 - Live announcer: "Keep informed. Listen for news every morning at 6 AM". Then jingle "AM and FM, WMCR". AC music. Positive ID this time; over WWRL. (SK-PA) IA Iowa City - 3/29 2141 - Pop music and local ads; ID as "AM Stereo 1630, 1630 KCIJ". Fair. (DT-JWI) 1690 WPTX MD Lexington Park - 5/22 1159 - Previously logged as WMDM; "16-90 AM, WPTX, Lexington Park - Legends of Southern Maryland," Followed by 30 seconds of dead air, then ABC news and local weather. Steady but weak. (PC-+ 0710 05/16 - Using "Legends 1690" and "Legends of Southern Maryland" slogans. Easy listening format. Discussion of new format and other changes at station. Still ABC news. Checked again at 0300 05/17 ... still carrying Sports Overnight America. (JM-SC) TIS AND MISCELLANEOUS WPPD925 NC Fayetteville - 5/17 1615 - "Fayetteville Area Convention and Visitor Radio 1680 Network" noted while in Fayetteville. Male and female alternating on tape loop with info on local attractions, which exits to take (off I-95), directions to the Visitor Center (complete with street address), ID by male. Didn't copy all of it, but complete ID that would be nice on tape. Heard to about 8-10 miles past I-95 exit off Highway 24 East. FCC Database lists 4 transmitters along l-95 at Exits: 41, 49, 55 and 61. Not only did I happen to come across a new (to me) TIS, I've already typed up a report! My first in a year +...I'm on a roll, hi! Mailing address: Fayetteville Area Convention and Visitor Center, 245 Person Street, Fayetteville, NC. 28301-5733 (MH-NC) OFF THE INTERNET 680 WRMD FL St. Petersburg - This piece from 5/26 titled Its tower repaired, Tropical 680 plays catch-up on the air by Pamela Davis © St. Petersburg Times: Twentyseven days after its radio tower was hit by a Bayflite helicopter, WRMD-AM 680 (Tropical 680) was back on the air Wednesday. The Spanish language station begins its regular programming today at 6 a.m. "We lost a lot to the competition," said morning show host Jose Rodriguez. "We're starting over. That's why we're calling the station Nueva Tropical 680." WRMD's new tower is shorter and the station is now at its full power of 1,000 watts. While they were off, I snagged a couple of good catches on 680. (PS-FL) 1230 WMOU NH Berlin - Info from Dave Harris, Boston Listserv: Heard on New Hampshire Public Radio news this morning: WMOU went dark this week; couldn't find a buyer. 690
 - ADDRESS UPDATES
 - WADS CT Ansonia 261 Portsea St., New Haven, CT 06519. Telephone 203/777-7690.
 - WFXN MN Minneapolis 7900 Xerxes Ave. South, Suite 102, Minneapolis, MN 55431. (SK-PA)

CKVL 850M

- 850 WTWB GA Statesboro - Returned "attempted, not known". Now trying P. O. Box. (DT-
- 860 WTEL PA Philadelphia – 2775 Beaver Ave., Camden, NJ. (SK-PA)
- 1130 WFAN MN Minneapolis - 7900 Xerxes Ave. South, Suite 102, Minneapolis, MN 55431. (SK-PA)
- 1200 WCHB MI Taylor - Returned "forwarding time expired" but new address on sticker is 2994 E. Grand Blvd., Detroit, MI 48202-3134. (DT-JWI)
- 1260 WSDZ IL Belleville - Returned. St. Louis P. O. Box not valid. (DT-JWI)
- 1300 WIBR LA Baton Rouge - Returned "attempted, not known". Address is not 9737 N. Winston. (DT-JWI)

10		
1310	WXMC NJ Parsippan JWl)	y-Troy – Moved and left no details; also applies to P. O. Box. (DT-
	WXTC SC Charleston (DT-JWI)	n – New address OK, but need more detail—likely suite number.
1330	WASA MD Havre de	Grace - P. O. Box 1591, Baltimore, MD 21203. (SK-PA)
1360	WWLG MD Baltimore	- Towson address is not valid; P. O. Box is OK. (SK-PA)
1440		Syracuse address is not valid. (SK-PA)
1490	WAFZ FL Immolake	e – New address OK, but need postal code. (DT-JWI)
	WMOG GA Brunswich	k – Torres Causeway address is not valid; P. O. Box is OK. (SK-PA) REPORTERS
PLB-MI	Phil Boersma	Spring Lake.
BC-NH	Bruce Conti	Nashua R8B, MWDX-5, 100-ft wire, 100-ft. Eastsloper.
PC-VA	Perry Crabill	Winchester - Drake R8; 100' RW.
MH-NC	Mike Hardester	Fayetteville - Toyota Camry radio with fender antenna.
RJ-NC	Russ Johnson	Lexington - Sony 2010, Grundig YB-400, Sangean ATS-505 and
		RS DX-375 receivers with modified MFJ-1026 to 160m inverted
		vee, and Q-Stick Plus.
SK-PA	Steve Kennedy	Coal Township – GE SuperRadio III; indoor wire.
WM-MD	William McGuire	Cheverly – DX-398.
MS-MA	Michael Shaw	Beverly - Sony 2010 with RS loop.
PS-FL	Paul Smith	Bradenton.
DT-JWI	Don Trelford	St. Ann's Bay, Jamaica West Indies – Kenwood R-2000; long wire NS-EW.

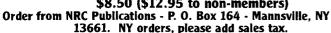
AM Station Location Maps

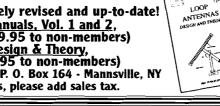
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DX Digest

International Jim Renfrew renfrew@localnet.com 61 Wilcox Street Rochester, NY 14607-3832

Foreign DX Catches. Times are UTC; for ELT, subtract 5 brs.

It's my birthday today, so how am I celebrating? I'm also going on a 100 km bike ride to raise support for Diabetes research. I haven't gone that far before, but as long as it isn't raining I should do fine. I've got a few sponsors, but I'm mostly doing it because I have diabetes and want to show that it doesn't stop me from living a full life. Maybe next year I'll go 100 miles!

Just five reporters this time, but lots of international news, and an interesting story from Bill Hepburn.

TRANS-ATLANTIC DX

- ALGERIA Bechar, APR 20 0345 // 549 (Good) man in AA Monotonic chant with strings peaked S9+20 strong then mixed with Germany. [Stromsted-MA] MAY 10 0013 - woman inArabic; over other. [Connelly*R-MA]
- GERMANY D. Radio, Donebach, APR 19 0325 Fair / 207 / 1422 (poor) light music. MAY 02 0101 - News in GG male-fair level. Preceeded by classical music/under Algeria. [Stromsted-
- FRANCE RFI Alouis, APR 19 0345 Loud, S9+30 "Don't get me wrong" female EE vocal, fast beat. APR 24 0526 - Morning News review and commentary // 1375 (St Pierre) both loud-S9+40, all FF, male and female. [Stromsted-MA] MAY 10 0013 - French talk by man; fair to good. [Connelly*R-MA]
- 171 MOROCCO Radio Med.-Medi-1, Nador, MAY 02 0250 - Good S9+20 signal. 0302: man with news about Philippines hostages, loud. [Stromsted-MA] MAY 10 0012 - male Arabic vocal & drumming; good. [Connelly*R-MA] MAY 24 0154 - Fair with Moroccan music and vocals. I thought this station signed off around 0100 and came back on at 0500, but apparently stays on later sometimes. [Dangerfield-PA]
- GERMANY Zehlendorf, MAY 02 0250 western music Poor signal [Stromsted-MA]
- TURKEY (presumed) Polatli (Ankara), MAY 02 0047 weak-in & out of noise with MidEastern music, Turkish female announcer. Chanting then strings S-9 peaks, modulation level low, good carrier but faded by 0300. Best on lower SSB after sign on, splatter on upper from Europe 1 on 183 kHz. Heard few days earlier but weaker. [Stromsted-MA]
- GERMANY Europe 1, APR 19 0339 Loud S9+30 FF Financial news then Football results, Club Espanol Vs Manchester? [Stromsted-MA]
- ICELAND Rikisutvarpid, Gufuskalar, APR 25 0215- S9+20 Good signal-slow beat rock with EE vocal/some interference from beacons. [Stromsted-MA]
- UNITED KINGDOM BBC WS synchros, MAY 10 0003 BBC World Service news // 5975 mentioned a gambling scandal involving a former Louisiana governor; fair signal. [Connelly*R-MA]
- 207 GERMANY D-Radio Aholming, APR 190320 - Trumpet piece, then MGG announcer "todays top story" English excerpts. [Stromsted-MA]
- MOROCCO RTM, Azilal, MAY 10 0014 man & woman in Arabic; in beacon interference. [Connelly*R-MA] MAY 16 0312 - Strong with fast Berber music, vocals and all. Last few days the only good LW station. [Dangerfield-PA]
- FRANCE Radio Monte Carlo Roumoulus, APR 19 0323 Romantic French music with female FF vocal, strong S9+20. [Stromsted-MA]
- POLAND Polskie Radio Konstantynow, APR 19 0311- News in Polish M+F newscasters, good-S9+10. APR 28 0306 - Again, news in Polish, then music, fair

signal. MAY 01 0241 -rock, female vocal, good signal S9+15, minor interference from SZO beacon. Female PP announcer, sexy voice. At 0242 male call in (poor audio quality) chatting with female radio personality,.S9+20. [Stromsted-MA]

LUXEMBOURG RTL Jungslingester, APR 28 0234 - Monotone FF male solo without music, followed by French violin French, S9+10. MAY 02 0245- Modern African music with vocal chorus in FF melodious. Loud, S9+30. [Stromsted-MA] MAY 10 0006 - rock music (sounded like Smiths / Morrissey); poor to fair. [Connelly*R-MA]

IRELAND New Atlantic 252 Clarkestown, APR 24 0520 -Very loud; rock with fast beat, S9+30. [Stromsted-MA] MAY 10 0010 - dance-



- club rhythms; over Arabic-sounding second station. + MAY 10 0037 "Atlantic 2-5-2" ID by woman; good. [Connelly*R-MA]
- 261 UNID APR 28 Germany/Russia or Bulgaria? Female voice under EOG beacon at 0249 and again at 0257, very weak signal but first time indication. [Stromsted-MA]
- 270 CZECH REPUBLIC Cesky Rozlas, APR 19 0250 Male Czech announcer, then popular music with vocal. News at 0300, male and female alternating then more music at 3:15. Fair signal faded by 0350. [Stromsted-MA] APR 28 0236- High pitched Female Czech?, vocal-modern Czech music best on USB S9+10, good, then male and female announcers alternating. MAY 02 0252- revival style rock with chorus. Male announcer Czech music. Some interference. from ESG beacon, best on USB. [Stromsted-MA]
- 549 ALGERIA Les Trembles, MAY 10 0043 Arabic talk seemed to be // 153. [Connelly*R-MA]
- 567 IRELAND RTE, Tullamore, MAY 10 0044 mellow pop vocal; to fair peaks (but bad WGAN-560 slop and storm static at times). [Connelly*R-MA]
- 639 SPAIN RNE1, La Coruna, MAY 10 0047 woman with Spanish talk; sometimes getting by CBN. [Connellv*R-MA]
- 693.7 AZORES RDP, Santa Barbara APR 30 0026 bits of music and het against 693.0 stations. [Connelly*D-MA]
- 711.04 WESTERN SAHARA Laayoune, MAY 10 0048 Arabic-style strings; poor with WOR phased [Connelly*R-MA]
- 765 SWITZERLAND RSR, Sottens, MAY 10 0050 mellow soul vocal; fair. [Connelly*R-MA]
- 774 SPAIN RNE1 synchros, MAY 10 0052 Spanish talk; poor. [Connelly*R-MA]
- AZORES RDP, Pico da Barrosa, APR 29 2342 Eagles "New Kid in Town" and other old pops; poor to fair. [Connelly*D-MA]
- 855 SPAIN RNE1, Murcia et al., APR 29 2343 fast Spanish talk by man; good. [Connelly*D-MA]
- 864 EGYPT Santah, APR 30 0018 Koranic male vocal; very good. [Connelly*D-MA]
- 882 CANARY ISLANDS // SPAIN COPE synchros, APR 30 0017 Spanish talk evenly mixed with UK. [Connelly*D-MA]
- 882 UNITED KINGDOM BBC Wales, Washford, APR 30 0017 English newstalk; mixed with Canaries-Spain; over slop from WCBS/YVYM-880. [Connelly*D-MA]
- 891 ALGERIA Algiers, APR 29 2348 shrill vocal, strings, and drumming; good, overwhelming WBPS. [Connelly*D-MA] + MAY 9 2240 pre-sunset fade-up. [Connelly*R-MA]
- 981 ALGERIA Radiodif. Algerienne, Algiers, APR 29 2357 Koranic type male vocal; loud. [Connelly*D-MA] + MAY 9 2252 bits of Arabic talk; increasing in strength. [Connelly*R-MA]
- 999 SPAIN COPE, Madrid, APR 29 2358 compressed Spanish talk; through tough slop (CKBW playing Goo Goo Dolls song). [Connelly*D-MA]
- 1017 GERMANY Rheinsender, APR 29 2353 German talk by man, then a music-hall style performance by woman (part talk, part singing with piano accompaniment); good. [Connelly*D-MA]
- 1044 MOROCCO Sebaa-Aioun, APR 29 2312 excited Arabic talk by man, possibly a political speech. This was followed by a calm-voiced woman doing a documentary. Signal was over Spain. [Connelly*D-MA]
- 1044 SPAIN SER synchros, APR 29 2355 fast Spanish talk by two men; now dominant and loud. [Connelly*D-MA]
- 1053 MOROCCO Tanger, APR 29 2315 Arabic music; in WEVD slop. [Connelly*D-MA]
- 1053 UNITED KINGDOM Talk Sport synchros, APR 30 0012 boxing coverage // 1089 mentioning Harrison, uppercuts; fair with WEVD phased. [Connelly*D-MA]
- 1071 SPAIN EI, Bilbao, APR 29 2356 Spanish talk getting around strong CBA. [Connelly*D-MA]
- 1089 UNITED KINGDOM Talk Sport synchros, APR 30 0011 play-by-play coverage of boxing match; good. [Connelly*D-MA]
- 1098 SLOVAKIA Slovensky Rozhlas, Nitra, APR 30 0010 woman in Slovak; good, covering Spain. [Connelly*D-MA]
- 1107 SPAIN RNE5 synchros, APR 30 0009 // 855 with rock music; through YVQT slop. [Connelly*D-MA]
- 1116 SPAIN SER synchros, APR 30 0009 fast talk and teletalk mixed with an unID music station (possibly Angola). [Connelly*D-MA]
- 1125 SPAIN RNE5 synchros, APR 30 0008 // 855 with rock music; to fair peak. [Connelly*D-MA]
- 1134 CROATIA HR, Zadar, APR 30 0007 Balkan (almost Greek sounding) male group vocal with mandolin or bouzouki accompaniment; excellent. [Connelly*D-MA]



- 1179 CANARY ISLANDS // SPAIN SER synchros, APR 29 2319 Spanish news by woman; fair.[Connelly*D-MA] + MAY 9 2359 teletalk; poor to fair. [Connelly*R-MA]
- 1197 SPAIN EI, Vitoria, APR 30 0004 news in Spanish by man & woman; excellent. [Connelly D-MA]
- 1251 HUNGARY Marceli, APR 17 0610-0658 Long CLA piano solo, then more popular music and talk in Hungarian (?), 0610 strong carrier, and at 0658 Cuba came on drowning them out, also some interference from WDAE. Could Cuba be jamming WDAE? [Trelford-JAM]
- 1251 LIBYA Tripoli, APR 29 2301 Arabic news; getting by strong CBGA. [Connelly*D-MA] + MAY 9 2352 Arabic chant; in CBGA/WKBR slop. [Connelly*R-MA]
- 1296 SPAIN COPE, Valencia, APR 29 2303 Spanish newstalk by man & woman; fading up. [Connelly*D-MA] APR 25 0435 Poor; talk in Spanish. No other TAs below this frequency, as late April seemed to favor the high end. [Conti-NH]
- 1305 SPAIN RNE5 synchros, MAY 9 2346 fast Spanish talk; choppy signal. [Connelly*R-MA]
- SPAIN RNE Arganda APR 28 0445 Good; man and woman in Spanish with telephone news/talk. [Conti-NH] MAY 9 2345 Spanish talk by man; getting by WLYN/CKBC/WDRC-1360 slop. [Connelly*R-MA]
- 1467 FRANCE TWR/RMC Roumoules APR 27 0405 Fair; classical music. [Conti-NH] 1485 SPAIN SER synchros APR 28 0415 - Poor; telephone talk in Spanish // 1575. [Conti-NH]
- 1485 SPAIN SER, Good, with man and woman in discussion. Mostly likely station is Santander, but wouldn't bet on it. [Dangerfield-PA]
- 1521 SAUDI ARABIA BSKSA, Duba, APR 29 2235 serious-sounding male Arabic talk; very good on pre-sunset reception. [Connelly*D-MA] + MAY 9 2248 Arabic talk by man, then instrumental music; fair to good. [Connelly*R-MA]
- 1521 SPAIN SER Castellon APR 28 0350 Fair; talk in Spanish // 1575. [Conti-NH]
- 1530 SÃO TOME E PRINCIPE VOA Pinheira APR 27 0335 VOA News Now in English // 9575, under WSAI. [Conti-NH]
- 1548 KUWAIT VOA, Kuwait City, APR 29 2309 VOA news mentioned a political event of 20 years ago. [Connelly*D-MA]
- ALGERIA RASD Clandestine, Tindouf, APR 29 2333 fast Spanish talk with Polisario and Radio Nacional Saharaui slogans / ID's, followed by Whitney Houston's 1985 dance hit "How Will I Know"; blasting over the domestics. There's much less co-channel competition on 1550 than on the former 1540 channel. [Connelly*D-MA] + MAY 9 2340 flutes, shrill vocal; mixed with domestics. [Connelly*R-MA]
- 1557 FRANCE R. Bleue, Nice, APR 29 2330 light pop vocal, then woman in French; to good peak over residual slop from nulled WQEW. [Connelly*D-MA]
- 1575 SPAIN SER synchros, APR 30 0032 // 1044 with Spanish news; over jamming or other odd-sounding signal. [Connelly*D-MA]
- 1583.6 CEUTA RadiOle, MAY 9 2336 Spanish music; poor. 1584 was just a het at the time. [Connelly*R-MA]
- 1584 SPAIN SER synchros, APR 30 0031 // 1044 with Spanish talk. [Connelly*D-MA]
- 1593 GERMANY RFE Holzenkirchen, no date, 1118-1136 instrumental orchestral music, semi-CLA announcement by woman in unlD language. [Trelford-JAM]
- SPAIN EI, Vitoria, APR 30 0031 non-SER Spanish talk; good. [Connelly*D-MA] + MAY 9 2338 Spanish ballad; through WUNR slop. [Connelly*R-MA]

Ben speaks: "Will be in Finland, Russia, Belarus, Lithuania, Latvia and Estonia until mid-June and may find some DX time for which I shall have along my Sony-100 and KIWA pocket loop. If I hear anything interesting I'll pass it along. Reception here has fallen off drastically, as is usually the case in May, and there is little to report this time. LW has been better than MW, with recent good signals from Morocco. The middle seems dead, both for TAs and LAs. I was happy to

receive a verie card from Greek Radio ERA for my April reception of Chania, Crete-1512 for countrry #128. Still no return from India-1566 and perhaps I should have sent it to the National address rather than to the Nagpur regional station. Will wait and see as it's one I really want. Have gotten some of my buzz problem solved. With help from a guy from Philadelphia Electric it was traced to a defective light sensor next door. My neighbor has turned off the system and says he has ordered new switches. Things have been better ever since."

PAN-AMERICAN DX

MEXICO XETNT Los Mochis, MAR 28 1228-0100 - LA pop music, fair, presumed. [Trelford-JAM]



SAHABAT ANDA DI SETIAP SUASANA 24 JAM NON STOP

Jl. Citandui No. 14, Surabaya Telp.: (031) 581-155 583-749 Fax: (031) 583-249

- 660 MEXICO XEAR Tampico, MAR 6 0130-0146 ranchera music, poor, presumed. [Trelford-JAM]
- 690 MEXICO XEN Mexico City, APR 4 2109-2152 play-by-play, likely football, Guadalajara vs. Mexico, fair. [Trelfrod-JAM]
- 720 VENEZUELA R. Oriente, YVQE, Porlamar, APR 30 0021 Oriente ID, high-energy dance music; over/under CHTN. [Connelly*O-MA]
- 760 BRAZIL R. Record, ZYH888, Fortaleza, APR 29 2338 Portuguese religious talk; fair with presumed WCHP nulled after WVNE sign-off. [Connelly*D-MA]
- 780 MEXICO XESFT San Fernando, APR 9 2147-2152 popular LA music, norteña, ID as "La Bronca Norteña", fair. [Trelford-[AM]
- 880 CUBA R.Progreso, Pinar del Rio APR 25 0500 Poor; top of the hour ID under WCBS, 0540 pop music // 640. [Conti-NH]
- 1020 MEXICO XEWO Chetumal, APR 13 0438-0541 popular LA music, ID as "Radio Chetumal", interference from unID SS station. [Trelford-JAM]
- 1020 VENEZUELA Mundial Margarita, YVRS, La Asunción, APR 29 2352 old-fashioned male group Spanish folk vocal; huge. [Connelly*D-MA]
- 1090 VENEZUELA Union R., YVSZ, Caracas, ÁPR 30 0011 Venezuelan sportstalk; through nulled WBAL and strong UK-1089 het. [Connelly*D-MA]
- 1140 VENEZUELA La Voz del Caribe, Porlamar, APR 30 0005 boxy telephone-type audio with Margarita and Porlamar local mentions, then a La Voz del Caribe" ID; atop CBI. [Connelly*D-MA]
- 1160 BERMUDA VSB3, Hamilton, APR 29 2249 // 5975 with woman talking about establishing better education in Africa; over domestics on early fade-up. [Connelly*D-MA]
- 1280 BERMUDA VSB2, Hamilton, APR 29 2300 end of religious program with a Canadian mailing address; initially good, then it faded into the jumble. [Connelly*D-MA]
- 1340 VENEZUELA YVNE Caracas, MAR 10 2145-2217 pop LA music, ID in part as "Radio Uno". [Trelford-JAM]

1375.02 ST. PIERRE ET MIQUELON RFO, MAY 9 2344 -French discussion; good. [Connelly*R-MA] *Jim speaks*: Apologies to Don Trelford! There's something not quite right in the times he reported. He says they are converted to UTC. He also gives EST as a reference just in case, but when I make a correction, it seems like some of the loggings are during daylight. In any event, Don, send me corrections if you can.

CORRECTIONS:

Just to set the record straight: In the last IDXD, where it says "Mark speaks" is actually mine and should say "Ben speaks". It's where I refer to a path of reception on APR 12. I figured Mark would wonder when he ever said that! [Ben Dangerfield] (Mark has probably been given credit for a lot of things that he wished he hadn't! - Jim) (And blame any other errors on me! -pls.)

PUBLICATIONS

AUSTRALIA / NEW ZEALAND: Folks we havejust released the May 2000 edition of the Australian and New Zealand Medium Wave guide, thanks to DXers within Australia and our friend Paul Ormandy from New Zealand. 32 pages of information, with the latest callsigns and address including the X banders to 1701. A small section in the front about antenna's, loops etc, then into the stations address and callsigns. All by frequencies. Comes in a plastic cover with cone binding. Price within Australia is AUD10-00 outside of Australia except New Zealand is US10-00. For New Zealanders contact Michael Pollard at mgpollard@xtra.co.nz for more details as he is has exclusive rights in NZ. Now there is more!!! in 6 months from now all will receive a FREE update, for changes/corrections. OK contact John Wright Australian Radio DX Club, Unit 4, 33 Kerrie Cresent, Peakhurst 2210 NSW Australia. No cheques, as the cost of cashing them is more than AUD10-00 (trust banks). so the price is inclusive of the admendment service FREE!, so cost again AUD 10-

00 within Australia, outside Rest of the World is US10-00. I am sure you won't be dissappointed.

INTERNATIONAL NEWS

BELGIUM: 1125, 1233 RTBF Radio Trafic is a new one. Relays of new RTBF traffic radio on DAB. Home page at http:// www.rtbf.be/trafic/ (A. Johansson via Swedx 05.05.2000 via Eurolog 6.5.2000) This station is called Trafic Plus and is an initiative by the RTBF. They started



broadcasting on MW on Friday May 5th and were originally an additional station on RTBF's DAB list. However, as many people are still unable to listen to DAB, RTBF decided to put the station on their two remaining MW stations: 1125 kHz (in La Louvière; used to be 20 kW), 1233 kHz (in Liège with 2.5 kW). The idea is to inform the listener about traffic and traffic related issues. [Herman Boel via MWC e-mail news 08.05.2000 via ARC Info-Desk]

- CUBA: I can supply 2 cassette tapes with daytime AM and FM bandscans from Havana and Trinidad, Cuba. If anyone is interested they should send \$2.00 for 2 cassettes + \$2.00 for shipping.to Jeff Kadet, K1MOD, PO Box 20, Macomb, IL 61455. <jkadet@macomb.com>
- FIJI: Just heard from a friend of mine at Air Fiji, the TV station Fiji one has been trashed by the armed coup, an some FM stations off air and a MW station in Suva, he is not a DXer and he is unable to shed light on frequencies. [John Wright, via Medium Wave Circle e-mail]
- IRAN / IRAQ: "I think there are 3 stations involved around 1205-1206 kHz: 1. Vo People of Kurdistan is at least now on 1206 kHz sharp. They sign off at about 2030-2100. They broadcast in Kurdi. Their ID is something like: 'Ira, Dengi Keli Kurdistana'. They are / / 4061a kHz. 2. Morocco is somewhere nearer to 1205 than 1206 kHz. At least here in eastern Finland they are much weaker than the UNID, which is number 3. They broadcast in Farsi (or Dari, if you like) and they are on the fq Karel mentioned (1205.68). I think they once signed off at 2230. I have heard many identifications from them but I can't make anything more out of it but 'Shadoye ...' in the beginning. They are NOT // 1332 or 1431,2, which carry the two different IRIB home sce programmes. WRTH lists 1188 with Tehran Provincial Prgr. Maybe that one has drifted? Can anyone hear Tehran on 1188 kHz (here it is blocked by DW St. Petersburg)? In fact, the programme is lighter that the usual IRIB programming and certainly not sounding like one of the Talebans. Or maybe it is a 'veiled' Iraqi propaganda programme towards Iran? Wasn't Baghdad heard exactly here some time ago?" [Mauno Ritola via HCDX 1287 via ARC Info-Desk]

ITALY: I read on hard-core that Italy has reactivated 846. That's too bad because I was going to try for South Africa on that channel this weekend from one of the nearby coastal DXpedition sites. South Africa has been logged positively from Newfoundland (even with Italy on) with help from auroral conditions and a Beverage aimed at deep Africa / eastern Brazil. At seaside sites such as Duxbury, MA I have heard second audio a bit after local sunset on 846 behind the strong Italy signal when conditions were good for Lesotho-1197, Angola - 1088/1502, and Brazil-690/760. Even if Italy is off, slop-over from not-totally-nullable local WEEI-850 will still make South Africa a tough one at most sites here in eastern Massachusetts. [Connelly-MA] The station has been reactivated on 27, 28 and 29 April *only*, for tests: these tests must prove whether the radiated energy level exceeds the Italian legal limit or not. If the levels will be too high, you can expect a good period for DX on 846... Otherwise, probably RAI will block the frequency as before. Or may be RAI will decide to broadcast at reduced power? Just keep monitoring 846, everything can happen in the coming future. [Fabrizio Magrone, Forli, Italy in Medium Wave Circle e-mail] I keep my fingers crossed that they will shut up. But I had the impression, that the signals were weaker than usual. So, if they'd use 300 kW "only" instead of 1200, that would result in a 6 dB weaker signal only, but most probably they would stay within their allowed local energy level. BTW, Hartmut Wolff heard a asian station around 2230 UTC (sounded Chinese, maybe the 250 Kilowatter from Taiwan?) when Italy was off. Alas, I had several Russians only. [Martin (Elbe?) in Medium Wave Circle e-mail] Monaco 702 has been noted with relays of RAI, including Notturno Italiano. [ARC INFO-

NETHERLANDS ANTILLES: At the beginning of the 2330 UTC broadcast on 23 April (Sunday), RNW announced that the transmitter site at Bonaire burned to the ground. That is a bit of an exaggeration. In the 2330 news bulletin, we broadcast the following item: "The power facility of Radio Netherlands Worldservice on the Caribbean island of Bonaire has been destroyed by fire, causing disruptions in our transmissions. Nobody has been hurt but the cost of the damage may run into several million dollars. Transmissions to North, Central and South-

America, western Africa, Australia and New Zealand may be disrupted for some time. When regular transmissions will resume is not yet known". The term 'power facility' refers to the generator room. The generators have indeed been totally destroyed. To the best of my knowledge, the transmitters and antenna arrays have not been damaged, or at least not seriously. The generator room is separated from the transmitter hall by thick walls and fire doors. Nevertheless, this is a serious blow. It's ex-



15

pected to be several months before the station can resume operations. Our Web site will have more information about changes to the schedule as soon as we have them. Basically it's a case of trying to maintain service on the same frequencies from different transmitter sites. Some Bonaire frequencies have already been taken > over by Flevo. Others will be arranged in the course of this week. Today being a public holiday in most countries, it's not possible to contact some of our colleagues at other broadcasters until Tuesday at the earliest. [Andy Sennitt, RNW in Hard-Core DX e-mail via BADX e-mail] Presumably this would mean that 800 kHz medium wave (PJB) is also off the air. [Connelly-MA]

PALAU: 1584 'Voice of Palau' T8AA noted with very good reception in Sandakan, Malaysia on evenings of 2, 3 & 4 May. Carries many syndicated US news and sport reports, and a long, repetitive tune - presumably NA - just before close-down, announcement at 1500. T8AA is a change from listed call-sign WSZB. [Alan Davies via ARC INFO-DESK]

SWEDEN: 189 Motala has started transmissions again, this time with modest power. Broadcasts are in connection with activities at the Motala Radio Museum. Address for reports: Teracom AB, Box 17666, S-11892 Stockholm. [Magnus Nilsson via swedx 20.04.2000, via Eurolog May 2000, via ARC Info-Desk]

CONTRIBUTORS

@Mark Connelly - WA 11ON - Billerica, MA; DX'ing from Duxbury ["D"] and Rockport ["R"]: Drake R8A, 30-m wire, APW-1 active whip, BBL-1 broadband loop, Superphaser-1 phasing unit. <MarkWA1ION@excite.com >

@Bruce Conti, Nashua NH; Drake R8B, MWDX-5, 30-m wire, 30-m east sloper, noise-reduced via 4:1 xfmrs and buried coax.

@Ben Dangerfield, Wallingford PA; R8A, 4 slopers, MFJ-1026 phaser. @Erik Stromsted/W1ZBT, Pepperell MA; <microadv@net1plus.com>

HIGH ARCTIC AM DX

by Bill Hepburn

Christopher Dunne asked me about AM DXing in Eureka (80 N 86 W), so I thought I'd copy my response to the list as others may find it to be of interest (I think I have given a few details of High Arctic AM DX in the past, but here goes).

I worked as a weather observer in the High Arctic from 1982-1985 at 4 different weather stations in the NWT (now Nunavut)....

- Eureka, Ellesmere Island
- Resolute Bay (now Qausuittuq), Cornwallis Island
- Hall Beach (now Sanirajak), Melville Peninsula
- Coral Harbour (now Salliq), Southampton Island

The later 3 are also Inuit hamlets; Eureka is strictly a weather station..2nd most northerly permanent settlement after the military base Alert.. (thus Eureka is the most northerly civilian settlement.)

Eureka was my first posting as a keen 19-year old after having graduated from my training in Cornwall ON. I arrived in August 1982...with 24-hour light still going on. The only stations receivable in the steady daylight were the now-defunct XPH (AFRS) 1430 Thule GRL, Avanatta Radio-990 Qaanaaq GRL and KBRW-680 Barrow AK. Once the autumn came with semi-normal day-night conditions, stations started to skip in from North America. By late September as 24-hour night arrived..stations within a rough equi-distant 2500-mile circle took turns coming in..first Europe in the evening..then Eastern North America around the middle of the night..and finally Western North America overnight. Surprisingly absent was Japan which was never heard..though the same distance away.

We had one TV station in Eureka (channel 9 - CBC North), but no local radio. "AFRS" (XPH) Thule

was on the air when I first got to Eureka, but it switched to FM by Dec 1982. CBC Radio from CFFB-1230 Iqaluit was mostly absent and very weak when it was in. CBC Northern Ouebec Service on 6.065, 6.195, 9.625 & 11.720 MHz from CKZA Sackville NB was unreliable. In the winter, our favourite and most reliable station for new music was "The Great 208" (208 metres) "Radio Luxembourg" on AM 1440, with studios in London. It came in strong between 9 PM-midnight daily. Some nights they had the Top 10 UK countdown..other nights the US countdown. It was a lively & fun station to listen to with great British DJs. Most of the North American stations that we could get did not play much of our kind of music - though CKOC-1150 Hamilton was decent. There were TONS of country music stations from Western Canada. CJVR-1420 Melfort was particularly strong. I guess a lot of



the regional Canadians were strong because their antennae were directional - pointed north - away from the US. I remember religious KJNP 1170 North Pole being a powerhouse too. Strongest Europeon by far was 1314 Norway. 1440 Saudi Arabia was heard often before Luxembourg took over. The drone of Radio Tirana was heard regularly in English on 1458. The Russian Woodpecker sound would occasionally chatter across the upper part of the AM band (though not the solid pounding that we would

Of course, in the summer we couldn't get any AM other than the Greenlandic-language 990 Qaanaaq and small-town KBRW-680 Barrow with its lists of community happenings and mix of MOR music. (As I said earlier, AFRS 1430 Thule was gone by '83). So what did we listen to for new music? - - don't laugh, but we listened to KYOI Saipan on shortwave - 9.670, 11.900, 15.190 & 15.405 MHz. It was commercial and had announcements in Japanese & English. It came in fairly reliably on our station's Eddystone receiver. So yes, KYOI had some regular listeners while it was on the air!

The weirdest thing of all had to be what happened in Hall Beach. I arrived in February 1984 in the tail end of "dark season". Would you beleive I could not get ONE single AM station. No matter what receiver what antenna or where in town. Not even CFFB-1230. The AM band was COMPLETELY dead. I couldn't believe it. Right through March..April..and May as well. On LW, I could get only 2 beacons...Hall Beach & nearby Igloolik. I left in June for Coral Harbour. I returned to Hall Beach in August and what do you know..wall-to-wall AM stations every night until my departure in late September including several stations from Mexico (not as many Europeans as further north though ... domestics were a lot stronger). The only explanation I have for the several-month-long blackout is strong absorption in the auroral "doughnut".

The following are combined bandscans for Eureka & Resolute Bay...not much DXing was done as I it was just too much of a solitary hobby to vigrously pursue while in isolation. (I know that sounds contradictory - but beleive me you don't want to find more ways to be even more alone than you already were up there. It was more fun to hang around the others than to sit alone by oneself with a radio. BTW - Pop. of Eureka was 9 in the winter - 11 in summer). I did DX a bit more from Hall Beach & Coral Harbour...furthur south...those DX Logs are not included below in order to give a better feel of reception in the far North..75 degrees N for Rez and 80 N for Eureka. I did also get some frequent summer FM & TV ES while in Coral Harbour.

Receiver: EU - Station's Eddystone Receiver

730 CKAC Montreal

RB - IVC BoomBox with internal ferrite antenna inside METAL building

_			
	ka/Resolute Bay LW (Voice) bandscan		CBX Edmonton
164	TPA Paris	750	KFQD Anchorage AK, Umanak GRL
182	D Saarbrucken	760	WJR Detroit
185	do.	770	WABC New York
236	Unid. URS best	780	WBBM Chicago
245	*VFC Cambridge Bay NU	790	CFCW Edmonton, CKSO Sudbury ON
254	*VFA Inuvik NT	800	CHAB Moose Jaw SK, CHRC Quebec
257	*VFE2 Earlton ON	810	CHQR Calgary, WGY Schenectady NY
305	*VAP Churchill MB	820	KCBF Fairbanks AK
350	*VFR Resolute Bay NU	830	WCCO Minneapolis
356	*VFY2 Yellowknife, *KEJ28 Kotzebue AK	850	Upernavik GRL, KICY Nome AK, KOA
395	*VFL8 Lynn Lake MB		Denver
* Av	iation Best	860	CHAK Western Arctic NT, CJBC Toronto
		870	WWL New Orleans
Eurek	a/Resolute Bay AM bandscan	890	WLS Chicago
570	CKSW Swift Current SK, Nuuk	900	CKBI Prince Albert SK, XEW Mexico
580	CKY Winnipeg	910	CHRL Roberval QC
600	CFQC Saskatoon	920	CFRY Portage MB, CBO Ottawa
620	CKCK Regina	930	CJCA Edmonton
630	CHED Edmonton	940	CJGX Yorkton SK, CBM Montreal
650	Qeqertarsuaq GRL	950	CFAM Altona MB, KIMN Denver
670	KBOI Boise	960	CFAC Calgary
680	KBRW Barrow AK, CHFA Edmonton, CJOB	970	KREM Spokane WA, CJYR Edson AB,
	Winnipeg		KIAK Fairbanks AK, WDAY Fargo ND
690	CBF Montreal	980	WCUB Two Rivers WI, CKRM Regina, CBV
700	WLW Cincinnati		Quebec
710	WHB Kansas City	990	Qaanaaq GRL, CBW Winnipeg
720	WGN Chicago		CFLP Rimouski QC, KOMO Seattle

1010 CBR Calgary, CFRB Toronto

18 1017 D.... Baden-Baden 1323 unID Radio Moscow stn. 1020 KDKA Pittsburgh 1330 CKKR Rosetown SK, WRIE Erie PA 1026 R.... Novosibirsk 1340 uniD QC SRC stn, CFYK MacKenzie 1030 WBZ Boston, KTWO Casper WY (Yellowknife) 1040 WHO Des Moines 1341 2BE Ulster (Belfast) 1044 D.... Berlin 1350 CKAR Oshawa ON, TPN Nice 1050 CFGP Grande Prairie AB, CKSB Winnipeg, 1360 WGEE Green Bay, KEYZ Williston ND. WHN New York, XEG Monterrev CKBC Bathurst NB 1053 2LO London 1370 CFOK Westlock AB, CIWW Saskatoon 1060 CFCN Calgary, KYW Philadelphia, CIRP 1377 TP., Lille Quebec 1380 WOHK Fort Wayne, CFDA Victoriaville OC. 1070 CKST St Albert AB, WTSO Madison, CHOK CKLC Kingston ON Sarnia ON (tent) 1390 CICY Medicine Hat AB, CHOO Aiax ON 1080 CKSA Lloydminster AB, WTIC Hartford 1395 ZA... Tirana 1089 2ZY Manchester 1400 CFJP Riviere-du-Loup OC 1090 CKKW Kitchener ON, KING Seattle, CHEC 1410 CKSL London ON, CFUN Vancouver Lethbridge AB 1413 Y.... Pristina YUG 1100 WWWE Cleveland, KFAX San Francisco 1420 CJVR Melfort SK, CJMT Chicoutimi QC, 1110 CHOT Edmonton, KFAB Omaha, CKID CKPT Peterborough ON Sarnia ON 1422 D.... Saar 1120 KMOX St Louis 1430 XPH Thule GRL, CJXX Grande Prairie AB, 1125 O.... Hainaut BEL KEZW Aurora CO 1130 WDGY Minneapolis, WCXI Detroit, WISN 1440 CFGO Ottawa, CIOI Wetaskiwin AB, LX... Milwaukee Luxembourg, HZ...Ras-as-Zawr ARS 1140 CKXL Calgary, CJTR Trois-Rivières, KSOO 1458 ZA... Tirana Sioux Falls SD 1460 KSO Des Moines, WOKO Albany, CIOY 1143 R.... Kaliningrad Guelph ON 1150 CKOC Hamilton, CKX Brandon MB 1470 CKO Montreal, CHOW Welland ON, CIVB 1160 KSL Salt Lake City Vancouver 1170 CKGY Red Deer AB, KJNP North Pole AK 1476 OE1 Vienna 1179 SBH Stockholm 1480 CKER Edmonton, CHRD Drummondville 1180 WHAM Rochester OC. WHBC Canton OH 1190 CFSL Weyburn SK, CHTN Charlottetown, 1490 CJMC Ste-Anne-des-Monts QC, CJSN WOWO Fort Wayne Shaunavon SK 1197 VOA Munich 1500 KSTP St Paul 1200 WOAl San Antonio 1503 SPS Stargard POL 1210 WCAU Philadelphia 1510 KGA Spokane WA, WLAC Nashville, CJRS 1220 CJOC Lethbridge AB, CJRB Boissevain MB, Sherbrooke OC WGAR Cleveland 1520 WKBW Buffalo, KOMA Oklahoma City 1230 CFFB Baffin, CJOK Fort McMurray AB 1530 WCKY Cincinnati, CISV Winkler MB, 1240 CJCD Yellowknife, unID OC SRC stn. KFBK Sacramento 1250 CHSM Steinbach MB, CKOM Saskatoon SK, 1539 DLF Mainflingen DEU CBOF Ottawa, WEMP Milwaukee 1540 KXEL Waterloo IA, WPTR Albany 1260 CFRN Edmonton 1550 CBE Windsor ON, KKJO St Joseph MO, 1269 DLF Neumunster DEU KXXR Opportunity WA 1270 CHAT Medicine Hat AB, CFGT Alma QC 1560 KKAA Aberdeen SD, WOXR New York 1280 CIMS Montreal, CIID Hamilton, CISL 1566 R.... Leningrad Estevan SK 1570 CKTA Taber AB, CKLQ Brandon MB 1290 CFRW Winnipeg, CHRM Matane QC 1580 CBJ Chicoutimi QC, VOA Antigua 1300 CIME Regina, KGLO Mason City IA 1590 KRRK East Grand Forks MN

CHLW St Paul AB

1314 LKS Stavanger NOR

1310 CKOY Ottawa, CHGB La Pocatiere QC,

1320 CFGM Toronto, CHQM Vancouver

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1593 D.... Cologne

1600 WTRU Muskegon MI, KLAK Lakewood CO

var."Russian Woodpecker" sound

Formats

Tony Fitzherbert akftrain@aol.com 356 Jackman Avenue

Fairfield, CT 06430-1728

Changes in programming status; reported by listeners

Welcome to another Formats Column. The only local change is that WEOK-1390, in Poughkeepsie has dropped its adult standards for an all talk format, id'ing as "Newstalk 13". Mike Hardester has Emailed that WSTK - 910, Jacksonville, NC, is now airing a gospel format "The Best Gospel in the Carolinas". Jeff Multer, of Fort Mill, SC, E-mails that WPTX 1690, Lexington Park, MD now broadcasts an easy listening format with ABC News. Its slogans are "Legends 1690" and "Legends of Southern Maryland". In response to my comment about WFSB - 1280's specific 1956 to 1963 format, Jim Guthrie pointed out that the PD could have instituted an even more specific 1956 AND 1963 format! Our format changes below are all from the pages of the M Street Journal. A growing new format is the ABC soft adult contemporary for the over 45 group, presumably to soothe them while they write their first dues checks to the AARP!

580	WOFE	TN	Rockwood	-Contemporary Christian, but talk from midnight to 0600.
610	KVLE	CO	Vail	- Talk // KSKE - 1060.
610	KNML	NM	Albuquerque	- All sports.
620	KIPA	HI	Hilo	- ABC 45 plus soft AC.
630	WEJL	PA	Scranton	- ESPN Sports.
660	WORL	FL	Altamonte	- New station but old call, AP News.
660	KZTU	OR	Eugene	- Contemporary Christian.
680	WCNN		North Atlanta	- Urban AC // WALR-FM.
79 0	KKON	HI	Kealakekua	- ABC 45 plus soft AC.
820	KCBF	AK	Fairbanks	- JRN Classic Country.
860	KPAM	OR	Troutdale	- News and talk.
860	WTZX	TN	Sparta	- Oldies.
920	KSVA	NM	Albuquerque	- Contemporary Christian.
920	WGHQ		Kingston	- Now all talk.
930	WAUR	IL	Sandwich	- Talk, Catholic talk evenings.
930	KKIN	MN	Aitkin	- JRN Adult standards.
940	KXUX	OR	Bend	- ESPN Sports.
960	WTGM	MD	Salisbury	- Drops sports for country music // WWFG "Froggy".
1050	WFRS	AL	Alexander City	- ABC Oldies.
1050	WBNC	NH	Conway	- Now oldies // FM, dumps automated country.
1050	KHTL	NM	Los Ranchos de .	Albuquerque - Talk.
1060	KSKE		Longmont	- Talk "Radio Colorado".
1070	WNCT	NC	Greenville	- JRN Regional Mexican.
1090	KNUZ	TX	Bellville	- Spanish religion.
1090	WISS	WI	Berlin	- Radio One Country.
1120	WXJO	GA	Gordon	- Black gospel // WXKO.
1150	WXKO	GA	Fort valley	- Black gospel "Heaven".
1190	KREB	AR	Bentonville	- ESPN Sports.
1190	WGKA	GA	Atlanta	- Sold, new owner replaces the fine arts programming
				with Reach Southern Gospel.
1220	KQMG	IΑ	Independence	- WW-1 Soft AC // FM. (Unlike the ABC version, this one
			_	is for all ages!)
1230	KRSY	NM	Alamogordo	- ESPN Sports and talk.
1240	WBAX	PA	Wilkes Barre	- ESPN Sports // WEJL.
1250	WQXA	PA	York	- ABC Real Country.
1260	KTUE	TX	Tulia	- Southern gospel and Spanish religion.
1290	WNIL	MI	Niles	- ABC 45 plus soft AC.
1310	KIQQ	CA	Barstow	- Regional Mexican.
1340	KATA	CA	Arcata	- ESPN Sports.
1360	WMFC	AL	Monroeville	- JRN Oldies // FM.
1360	WBLC	TN	Lenoir City	- Religion.
1380	WTMC	DE	Wilmington	- Latest attempt at All Traffic all the time!!! The other at-

tempts elsewhere all failed!

20 1390 1400 1410 1410 1440 1450 1450 1450	KZAR KDRG WYIS KRIL WKJN KDMN KNOC KBKW KCLX	MT GA TX PA CO LA WA	Rogers Deer Lodge McRae Odessa Carbondale Buena Vista Natchitoches Aberdeen Colfax	- JRN Regional Mexican One on One Sports Urban programming Talk // KMND JRN Standards // WEMP Talk // KSKE - 1060 Talk and JRN Standards Talk and ABC Standards ABC Real Country.	NewsRadio KCNZ AM1650		
1450	KCLX		Colfax	- ABC Real Country.	KCNZ AM1650		
1460	WRAD	VA	Radford	- Adult standards.	1250AM AIVITUSU		
1470	WFNT	MI	Flint	 ABC Adult Standards. 			
1480	KDXX	TX	Dallas	- Romantica "Amor" // thre	ee FM's!!		
1490	WTTB	FL	Vero Beach	- CNN Headline News and	talk.		
1490	KORN	SD	Mitchell	- Talk.			
1500	KDFN	MO	Doniphan	- ABC 45 plus soft AC.			
1510	KPBI	AR	Greenwood	- ESPN Sports // KFDT.			
1560	KZQQ	TX	Abilene	- One on One Sports "Zoo".			
1570	KHPN	CO	Loveland	- JRN Country.			
1580	KFTN	CA	Merced	- JRN Spanish hits // KAXV	N .		
1590	KLQO	NW	Sun Valley	- Spanish hits.			
1660	KAXW		Merced	- JRN Spanish hits.			
Thi	This is all that I have as of May 21. Thanks to our contributors for keeping us up to date well, as						

This is all that I have as of May 21. Thanks to our contributors for keeping us up to date ... well, as up to date as possible in the broadcasting business. Please send your area stations' format changes in to your Formats column.

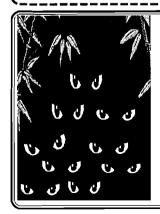
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DX'er's Notebook

Dave Braun dcbraun@delanet.com 863 Allabands Mill Rd. Camden Wyoming DE 19934-2132

Shared tips, topics, and Internet info

We begin this time with a follow-up to an earlier discussion of RFI:

Russ Edmunds <wb2bjh@yahoo.com>: Some time back, I posted a comment where I had thought that I was getting RFI from the meter-reading transmitter from my local water company. It turns out, once I took the time to check in detail, that the source of the RFI is actually the electric meter. This is an old-style meter, probably dating from when the house was built (around 1966). We are scheduled for transmitter meters for gas and electric to be installed in a year or so, but before I contact the utility about this, I wanted to see if anyone was familiar with this kind of problem. The RFI is most prominent below 800 kHz, and virtually nonexistent above 900, and takes the form of a steady moderately high-pitched whining buzz. Thanks for any input!

Ben Dangerfield <BEN-DANGERFIELD@email.msn.com>: Try E-mailing NRC member John Harding at JHarding@epri-peac.com. He used to work for PECO and gave me good advice on my buzz problems and provided me with the name of a PECO guy who specializes in this sort of thing. John's home is in Blue Bell but he is working in Knoxville.

Russ Edmunds: Thanks, Ben! I'll do that. If he lives in Blue Bell also, he can't be too far away when he's here, hi.

More on QSL's, continued from last issue:

John Callarman <jcallarman@register-news.com>: Who besides me has a QSL from KE2XZG-600, New York?

Robert Foxworth <rfoxwor1@tampabay.rr.com>: John l think this was WNBC-660 when they tested the Kahn ISB AM stereo mode (not on 600). If it was not AM Stereo, then it was a mode in which they phase-modulated the carrier to carry some Military teletype information. This went on for a few years and was not audible to any AM listener. I think this was done in the early 60's. It was written up in the 1962 issue of the IRE Proceedings (now IEEE). I have a letter QSL from KE2XXS which was the Kahn AM Stereo mode being tested on WGBB-1240 Freeport, LI NY. (heard from north New Jersey) and I think it was in my school days or just after. The most exotic thing I recall hearing was a 400 Hz tone and a 1000 Hz tone at the same time on 1110. Every minute one tone would break and I could hear loudly "WBT Main transmitter, Charlotte, NC" and 30 sec. out of sync, the other weaker tone would break and I could hear, under the loud tone, a faint voice say "WBT satellite, Shelby, NC, testing" Shelby was a repeater in the KFAB null to help reception to the west. I tried like anything to get a "proper" verie for this, all I ever got was an assortment of WBT postcard QSL's with no data, so one day I took one and typed in the details myself!!!! This was an interesting deal. They used chains of vacuum tube divider circuits at the main XR to divide the 1110 carrier all the way down to audio, fed the audio tone over a phone line over to Shelby and multiply it back to RF to feed the satellite xmtr, never had any phase problems that way, I believe. WBZ used to have a WBZA-1030 in Springfield MA. I have a QSL from them that says "51,000 watts".

John D. Bowker <wa2wen@juno.com>: John ...You asked about KE2XZG-600 in New York. That's obviously a licensed experimental station and I'm wondering what they were doing at 600 kHz .. particularly with WICC right up the road. Any clue about their experiments on the QSL?

Patrick Martin <mwdxer@webtv.net>: Remember WXLE-1385/1386-Canton Island-250w? That was a real toughie to QSL in 1979.

Robert Foxworth: Had carrier from presumably them, a couple times around 4 AM on Mondays in 1973 or 74, usually when I'd get unreportable traces of what I believe was 4QD-1550. Generally in mid-March at the equinox. Never near good enough to get any audio but I think if I had a Bev, I could have done it. I was in western Long Island, NY then.

Bruce Conti <BACONTI@aol.com>: The QSL discussion is making me wish I had started this hobby earlier. My QSL collection pales in comparison. I have a few nostalgic cards from the seventies, such as "WLS Musicradio 89," WEEI when it was on 590, WCFL Chicago, WHEB Portsmouth, NH, and CFCF Montreal. I also have a copy of a QSL for "Radiofone Broadcasting Station" WKAA Cedar Rapids at 360 meters, dated Jan. 26, 1925. This was from a fellow engineer's grandfather, discovered in the attic. No matter how much I pleaded, he wouldn't give up the original, so I settled for a copy. It

50.000 WATTS NORTH POLE ALASKA

1170

VISITORS WELCOME

would be great to share some QSLs from everyone on the NRC website. Perhaps they could be published in the NRC's DX News too, bringing back a version of the old CPRV Page.

Patrick Martin: I also have the old WEEI-590 QSL'd from here in Oregon. I do remember them running a DX Test that I heard. It may have been about 1970 (I haven't checked the QSL card). I remember having a very tough time logging them with KGMB-Honolulu blatting away on the channel. KGMB used to be "gangbusters" on 590 at night. Hawaiians to do not have the same signals they used to gave here. I remember KMVI-550 with 1 KW wiping out KOAC any night of the year. I still hear them, now 5 KW, but they don't have the same signal. The good ol' days....

Pete Taylor <taytac@worldnet.att.net>: AL7XD-770 SACRAMENTO - Anyone else have a verie from this station? It was running 50kw out of Sacramento prior to being sent to Vietnam by the Army. I was at KFOG at the time so sent them some 45s (we were running Schulke's SRP EZ format at the time but pop DJ promo 45s still came rolling in!) This was in 1977. CANTON ISLAND 1385-86 - I logged this in SF but obviously heard it a lot while cruising aboard the CGC Winnebago between Honolulu and Yokosuka. I corresponded with Joyce Haas over a year and a half period and sent her (1) a cassette of music (somewhat more current than the EZ she was running) and (2) a roll of film. She sent the roll back and the shots were of the tower and various pieces of their antiquated equipment. There were also a couple of Joyce, who indeed, was a very attractive young lady, cavorting about in shorts (as much as one can cavort on a tiny island). She also sent the cassette back with an aircheck which had a terrible 60 cycle hum on it. In her last letter, just prior to the station's closing, she gave me a Honolulu address but also mentioned she would ultimately end up in Oakland, continuing to work for Global Associates. I do not know if she was related to Wally Haas (I'm not exactly a sports nut but think he owned the Raiders at one time - or was it the A's?) In my last letter I mentioned that when she got back to Oakland, my wife and I would love to have her over for a get together which would have included a bunch of Bay Area DXers. Maybe that was too much for her!

More that refers to QSL's:

Patrick Griffith, N0NNK <AM-DXer@webtv.net>: I recently sent a report to KSVA/610 at the address in the 20th edition AM Radio Log. Mike Stark, Director of Engineering for Clear Channel in Albuquerque, responded stating that they had sold KSVA to Lifetalk Broadcasting in June of '99 and that they had resold it to Citadel Communications last month. He was kind enough to provide the following address updates: KSVA/610: 500 4th NW, Albuquerque 87102. KABQ/1350 and KXKS/ 1190: 2700 San Pedro NE, Albuquerque 87110. Mr. Stark also stated that he would be happy to respond to QSL requests for KABQ and KXKS at the latter address! It seems to me that many of the DXer friendly engineering people that I have encountered in the past couple of years have been Clear Channel folks. Several of them have gone way out of their way to be helpful. I wonder if they have a company policy encouraging cooperation? **Wayne I don't know how you keep up with all these changes. It must be a full time job! Let me take this opportunity to say thank you.**

Wayne Heinen <Nrclog@aol.com>: Patrick, It is a large job, but the many who forward tidbits like that last post make it somewhat manageable! Thanks for the kind words...

Randy Stewart stewartjrs555t@mail.smsu.edu>: That's very good to know, not only as a DXer but as a continued fan of AM radio in general... at least Clear Channel has SOME redeeming qualities, hi!! Unfortunately, faith in C-Quam AM stereo is apparently NOT one of them... aren't they the outfit that has unhooked the stereo generators at all the stations they own?

Luke Steele <ekul2891@ifriendly.com>: Hah! Glad to know they have some redeeming qualities. Their FM programming is homogenized as can be. Zzz...Also, they took over many nice smaller groups.

Patrick Martin: Come to think about it, many of my QSLs in the past few years have been from Clear Channel stations, such as KOY-1230 and KGME-550 AZ. Hopefully it will rub off on others. I do know some of the CEs letters have Ham Call letters mentioned, so at least many know what a QSL is

And I'll continue the theme of QSL's, with the following discussion from a couple of months ago, which is related to the above:

Patrick Martin: Something needs to be done to protect these beautiful cards and letters from all over the World. I know when my time comes, I sure wouldn't want my collection thrown away.

Russ Edmunds: There already is an organization which does that, and I believe does so on a multiband basis in the US & Canada. In fact, I believe NRC is in some way a sponsor or affiliate. But, since I'm currently having a memory failure [probably due to the prior massive

hacker attacks,] I can't remember their precise name. If Paul doesn't, I know Jerry Starr is, and perhaps we can get the info on here one way or 'tother.

Bruce Conti: The University of Maryland presently houses the OSL collection of the Committee for the Preservation of Radio Verifications (CPRV). Much of the collection is on display in their broadcast museum. I'm sure that they would accept any QSL donations. I don't have the contact info at Arthur Review



1001 Farnam-on-the-Mall Omaha, Nebraska 68102 my fingertips, but will post more info about the CPRV and the University of Maryland when I come across it. The NRC also runs a program through which labels can be ordered to identify QSL collections for preservation in the case of the owner passing away.

Patrick Martin: Thanks for the info. Indeed that is great news!

Russ Edmunds: That's it! Thanks, Bruce!

Patrick Martin: Are the OSLs open for public viewing?

Paul Swearingen <PlsBCBDXER@aol.com>: Pat wouldn't have access to the info printed in DX News. But once again, for all, you can order free 3-inch-square stickers from Ron Musco - P. O. Box 118 - Poquonock, CT 06064-0118, to put on your collections (well, the binder, anyway). Ron has set up a preservation program for recordings, veries, etc., which all will have access to. The "other" organization has managed to bury their collection in a library in Maryland, where almost no one now has access to it. The issue of non-access is why Ron started up a parallel collection, for all radio hobbyists.

Carl W. Dabelstein <ckdabel@email.msn.com>: The way things have become these days, perhaps we should be sending our veries to the Smithsonian for permanent storage! From 1959 through 1991 back in the Midwest, I verified 2,398 AM stations out of 2,578 logged. Thus far this season I have veried 4 out of 26 reports sent.

Russ Edmunds: Welcome to the fold, Skip! Those kinds of results many years back caused me to give up on veries. Then after I moved here, spent several years inactive and then started again, my reel taper died, and getting a new one became too big of a challenge, hi. Since I reactivated, most of my DX has been in the car, so I would've stopped taping anyhow...

Russ Edmunds: In line with the earlier discussion on the preservation of QSL's, I received an email from the CPRV's Chairman, a portion of which is excerpted below.

Jerry Berg <ipre>jberg@tiac.net> wrote: Your message on the NRC reflector about QSL preservation came to my attention. The group you were thinking of was the Committee to Preserve Radio Verifications (CPRV), of which I am the chair. You can find out more about us in the CPRV section of the website; or if you would like some information by mail, give me your address and I will be happy to send it. Roughly 60% of our 30,000 QSLs are MW. The MWers have been some of our biggest supporters, and as a result the CPRV MW holdings include the QSLs belonging to such MW greats as Gene Allen, Frank de Macedo, Bob Gorsuch, Roy Millar, Russ Mappin, Tom Farmerie, Dick Daneker, Bob Knox, Bill Prater, Tom McCormack, Warren Routzahn, Norm Maguire, John Tweedie, Carroll Weyrich, Howard Kemp and Len Kruse.

Fred Vobbe <fredv@nrcdxas.org>: Just a thought... not many of us have access to seeing these, unless we have the money to travel, and the time to sit down with someone who has them for viewing. What about posting them on the web? I'll be happy to scan the ones I have and post them to a page. Any thoughts?

Randy Stewart <jrs555t@mail.smsu.edu>: Great idea! A QSL-images page would make a nice addition to the NRC website, don't you think? I don't have a scanner, but we may get one some day soon...

ordered to identify QSL collections for preservation in the case of the owner passing away." Has this program led to any veries being submitted to NRC? If so, who has them?

Fred Vobbe: Musco has them. Perhaps we could get an opportunity to scan them for our pages? Paul Swearingen: As I've mentioned here, and as has been published in DX News, Ron Musco has custody of all veries submitted.

Russ Edmunds: The following is an excerpt from an email received from Jerry Berg of the CPRV in response to a couple of questions I posed to him from the prior message. "This flap over accessibility goes back to the two E-mails (below) from four years ago, when the collection was housed at Christian Science Monitor HQ in Boston. The collection has since moved to the LAB, and the QSLs [collected by the CPRV - RjE] are available on the same basis as other things at a research library. You can walk in and ask to see the collection (as Adrian Peterson did not long ago, and subsequently told me that the people there were very accommodating). This year the building in which the LAB is located (Hornbake Library) is being completely renovated and turned into a "special collections" library. The LAB is slated to move into new and larger quarters there, with top-of-the-line facilities for users.

The following is regarding the GE Superadio:

Deane D. McIntyre <dmcintyr@ucalgary.ca>: On Saturday morning I dropped by a local garage sale here in Calgary AB and spotted a GE Superadio (I) with a \$2 (Canadian) price tag along with a note that the switch was defective. Of course I brought it in a flash as it seemed to be in reasonably

good condition. Upon getting it home, I discovered that the radio would operate if one fiddled with the switch and held it part way in. I opened the 92.5 radio and discovered that contact cleaner was of limited help and that the switch was beyond repair. So I replaced it with a miniature toggle switch I had on hand, epoxy holding it in the same place as the original switch. The toggle handle, after reassembly, poked out of the top where the original



switch button had been. While I had the Superadio open I touched up the AM antenna and RF trimmer caps but did not otherwise align the set. After allowing the epoxy to harden overnight, I filled it with D-cells. A cursory bandscan indicated that this Superadio was somewhat hotter than my other Superadio, so I went on a drive away from the city of Calgary with its seven 50 kW locals and electrical noise to the hamlet of Madden, about 30 miles NW, to a small campground that I occasionally use as a DX site. (The detailed bandscan Deane included at this point is not being reproduced here - db) The FM performance was also quite good. Those living in the east or CA may think that the total number of stations logged was not all that great, but the density of AM stations is rather sparse. All AM stations in Alberta in the 350 mile stretch from the US border to Westlock were logged. Who says that DX radios are expensive-\$2 Canadian is about \$1.30 US!

Ragnar Danneskjold <lwdxer@juno.com>: I have found them that way. It is one of those things where you have to be at the right place at the right time. Somedays are better than others, and when you get a deal like that, its one of the better days.

David Coons <davidcoons@webtv.net>: Five years ago I found a Superadio "plus" digital model in a local flea mkt. for 15\$..works great etc.

Powell E. Way III powell@conterra.com>:You'd better hoard that. Those, I hear, are RARE! I have a SR II and the Radio Shack one. BUT for the bedside radios, I have a Hallicrafters SX-62A, a Hallicrafters SX-110, and a Hallicrafters S-40B. The S-40B stays on for hours and hours when I'm in the bedroom. The SX-62A blows EVERY other radio away. I never use it at night as a go to sleep radio as the lighted dial keeps me awake. It glares in my face. The S-40B, does too, but it's a nice green glow, and it's diffuse. I have 2 Hammarlund HQ-129-X general coverage receivers. Even though they are 1946 models, they are quite sensitive, EASY to work on, and are excellent AM performers, and still [even WITH E-Bay] don't cost too much, if you find one. I got one out of the trash at a radio station.

Ragnar Danneskjold: I am SUPER jealous. I have always wanted a Superadio +. If you ever decide to get rid of it, let me know.

Bob Smolarek <radiobob@ptd.net>: It's amazing that just about everyone who owns any of the Superadio's has had problems with that On/Off push down button on the top of the radio. Both my SR-I and SR-II have new switches on them. But the main thing is that they still work well pulling in the DX. Also my Superadio-III is weird. If the temperature goes below 70 degrees or so the sound becomes very distorted. It's the strangest thing I've seen, no other radio I've ever had has done this. Also the calibration is horrible, WFAN on 600, WOR on 650, WABC on 700.

Ragnar Danneskjold: Maybe I am a rare bird. I haven't *YET*, knock on wood, had to replace a switch, but taking the sets apart without breaking them is a real challenge. It is really something that radios that old are real serious portable DX radios. The fact that it is solid state makes it possible. It really is a terrible shame that radios of. "If the temperature goes below 70 degrees or so the sound becomes very distorted." That's a new one for me. I do have a Chrysler car radio that will not turn on unless the temp is over 0F. "Also the calibration is horrible, WFAN on 600, WOR on 650, WABC on 700." Extremely bad calibration is the trademark of the SR Ill's made in Indonesia. I have one made in China and strangely, the dial calibration, with fully charged batteries is dead nuts right on. The one I have made in China is even more sensitive than the Indonesian copy but not by much. Something happened to SR III when production was moved to Indonesia and it was not for the better.

Tom Dimeo <radio@ezonline.com>: Wonder if the problem could be something as simple as a speaker that has a diaphragm or voice coil that does not work well in cooler temperatures?

Pete Kemp <kempp@bethel.k12.ct.us>: 70 seems like a pretty normal temperature. A very strange place for a cut off frequency with distortion. This reminds me of the time in the early sixties when I went with a group of scouts on an Operation Deep Freeze camp out in January. I brought along a transistor radio, so could listen to the WABC tunes at night. It was so cold ... the little 9 volt battery froze up, not producing enough juice to power the radio. I had to put the unit near the fire to warm it up. Close enough to warm it up and far enough away to keep it from frying. In the end not worth the effort, as the noises from the fire just about drowned out the puny sound from the 1" speaker:)

The next items strike my fancy as an engineer...

Eric Floden@pch.gc.ca>: Edmonton has two powerful stations at 630 (CHED) & 1260 (CFRN), one of which is double the other's frequency. I can't think of anywhere else this happens. Is this a rare occurrence? What is the effect of this?

Russ Edmunds: I am sure it's not as rare as we might think, but who knows! As to effect, one effect is that CHED's harmonic on 1260 isn't going to be a problem as CFRN's signal will bury it, hi.

Niel Wolfish < niel@ican.net>: Off the top of my head, Washington DC is also on 630 and 1260. And just down the Queen Elizabeth Way from me St. Catharines' CKTB and CHSC are on 610 and 1220. And we've got CFYI-640 and CFYZ-1280, although CFYI's transmitter isn't in Toronto and CFYZ is "only" the Pearson Airport information station. I'm sure there are many more examples and somebody out there is probably working on the authoritative list right now...l seem to recall that when local station 1480-CKDX (nee CKAN) in Newmarket moved to FM a few years ago, my car radio would pick up 740-CBL's harmonic on 1480. I suppose it was always there under CKDX but I had never noticed it before.

Pete Taylor: Add Seattle, with KNWX-770 and KXPA-1540. On my bare 2010 and on many car radios, KNWX really does a job on them, too!

Doug Smith <w9wi@bellsouth.net>: Nashville: WSM-650/WNQM-1300, Bakersfield: 550/1100, Washington: WMAL-630/WGAY-1260. I've never noticed any problems from WSM's second harmonic, though I almost never listen to WNQM.

John Tudenham <w0jrp@earthlink.net>: I recall visiting Ernie Wesolowski in Omaha a few years ago and driving around he showed me the site of 590 WOW and the 1180 station KOLL was taken out by WOW when we got within 1/2 a mile .(590X 2=1180)

Bruce Conti: In Boston, WRKO 680 and WLYN 1360. Close to the WRKO transmitter site, WRKO will wipe out WLYN 1360 on the car radio. In England, BBC 648 and BBC 1296.

Fred Vobbe: "I've never noticed any problems from WSM's second harmonic, though I almost never listen to WNQM." When does WNQM have a silent period? It would be interesting to check it. Here in Lima, 1150 is very clean. however 940 does have a second harmonic at -38 dB down when on their night

Fred Vobbe: "I suppose that's one of the reasons that a transmitter that's type accepted at one power is NOT necessarily type accepted at lower powers!" Actually, I know why. They are using a mish-most of a power divider when they go to night power, and the impedance is *real* funky when they try to bleed off 244 watts from their Harris MW-1.

And finally some internet/e-mail update info, this from Scott Fybush's NorthEast Radio Watch:

May 6, 2000: The Baltimore Orioles have a new radio affiliate far to the north of Camden Yards. WYSL (1040 Avon) in the Rochester market is carrying O's games this year. It's no big mystery: the Orioles are the parent team of Rochester's AAA Red Wings, and since the Wings are on the competition (Clear Channel's WHTK and WHAM), the big-league club is better than nothing come baseball season. NERW notes that Orioles fans in Rochester — and there aren't as many as there used to be, given how shabbily the parent club has treated its longtime farm team lately — have always been able to tune in night games on WBAL and WTOP)...Speaking of Entercom/Rochester, it looks as though that company's WEZO (950) is yielding the standards battle to Crawford's WLGZ (Legends 990). WEZO was already breaking away from the satellite "AM Only" format to lease two hours nightly to Spanishlanguage broadcasters; now they've also leased out morning drive. Broadcaster Bob Scott is buying the time for a business-talk show that's done live from the Crowne Plaza Hotel downtown. We're sure WLGZ doesn't mind the disappearance of format competition from 6-9 each morning...The Nashua Pride have ended up on WSMN (1590) after all; the team struck a deal to broadcast its home games on the station, with the possibility of adding road games if they can find a way to do so cheaply. WSMN's John Collins will handle play-by-play...One more note from just outside the region this week: WKOV (1550 Pittston) in the Scranton market is reportedly returning to the air after being dark for a few months. The new programming on the station will be oldies, simulcast with WICK (1400 Scranton) and WYCK (1340 Plains); expect new calls as well.

May 12, 2000: What are the correct call letters of 1260 in Westport? NERW reported last fall that the station was changing from WMMM to WSHU(AM) — but the call change appears not to have made it all the way through the FCC. We're guessing it's part of the ongoing database problems, and we'll be keeping an eye on the situation...A call for help from NEW HAMPSHIRE: WNTK's Bob Vinikoor checks in with an update of sorts on his long-unbuilt WQTH (720 Hanover) construction permit. It seems the plans for WQTH's 3-tower array keep getting caught in hassles with local zoning boards, and now Bob's looking for some advice from anyone else who's dealt with radio-related zoning problems. Contact him at (603)448-0500 or <wntk1020@aol.com> if you can assist...The storms that blew through Albany this week knocked several local stations off the air, and when they cleared, one was back *on* the air. WABY (1400 Albany) had been simulcasting sister station WKLI (94.5 Ravena) for a few days before going silent; it's now back on with the all-news format it had been using...We're also hearing that WMVI (1160 Mechanicville) was back on the air for a few hours this week to stay clear of the "one year and you're gone" silent-station rule. Rumors of a major group purchase and power increase appear, for now, to be just rumors...M Street (which just released the ninth edition of its Directory, a welcome addition to the NERW bookshelf, despite the best efforts of the UPS guy to leave it in the pouring rain!) reports a change of format at WWLE (1170 Cornwall), from a simulcast of country WRWD (107.3 Highland) to CNN news. A sale of the station is still pend-

May 19, 2000: Boston's daytime-only urban AM station, WILD (1090), is about to join the fastest-growing urban station group in the country. Radio One, which entered the market last year SPORTS RADIO 1290 AM



with its purchase of Brockton's WBOT (97.7), is entering a time-brokerage agreement that will put WBOT under WILD's Dudley Square roof. WILD's owners, the Nash family, have fought valiantly to keep a successful music format on the 5 kilowatt daytimer in the face of competitors like Clear Channel's WIMN (94.5) and now WBOT. Despite occasional rumors about deals that would give WILD an FM presence, until now the station has remained AM-only. The deal with Radio One keeps the station's license in the hands of the Nash family, honoring Bernardine Nash's promise not to sell the station after the death a few years back of her husband, station founder Stephen Nash. It is, however, expected to allow Radio One to change the calls of 97.7 to "WILD-FM," putting the well-known "WILD" brand where most of the format's listeners now tune. As for format changes on AM 1090? NERW expects the station's music to start skewing a bit older, with more talk mixed in, but with no real change to the station's mission of serving Boston's black community. WILD becomes Radio One's 50th station nationwide...A lightning hit on the tower of WLFH (1230 Little Falls) wiped out the computers for both "Bug Country" (WLFH, WBUG-FM 101.1, WBUG 1570) and "Wow-FM" (WOWB 105.5/WOWZ 97.9), forcing both stations to run commercial-free off a pair of CD changers for a few days until things were

And, finally, I thought this was an interesting request found on Chris Coleman's "phillyradio.com" web site (the following was dated May 28, 2000):

Kevin Fennessy and Radio Station WFBS (1280-PA, db)have an urgent critical need for a broadcast engineer/computer systems person to come to our radio station ASAP, to re-install and re-deploy our hard drive automation system. New software, new hardware, new station, new network affiliation, entire radio station has crashed leaving the owner behind the console around the clock.

db: I'll leave the rest of the message, which included details on how to contact them and work out an agreement. Just thought that was an interesting comment on the state of some radio stations. See you in July.

Sports
Barry S. Finkel bsfinkel@ANL.gov
10314 S. Oakley
Chicago, IL 60643-2409

Network listings for team sports stations

Here is Major League Soccer (MLS) flagship information for the 2000 season from <<www.mlsnet.com>> via Bob Pietsch (e-mail).

Chicago Fire	560	WIND-IL	(SS)
Ü	1030	WNVR-IL	(Polish)
Colorado Rapids	950	KKFN-CO	(EE)
•	1090	KMXA-CO	(SS)
Columbus Crew	1460	WBNS-OH	(EE)
Dallas Burn	620	KMKI-TX	(EE)
	1270	KESS-TX (SS)	
D.C. United		No information	n available
Kansas City Wizards		No information	ı available
Los Angeles Galaxy	1110	KRLA-CA	(EE)
•	1020	KTNQ-CA	(SS)
Miami Fusion	79 0	WAXY-FL	(EE)
	1360	WKAT-FL	(SS)
New England Revolution	1510	WNRB-MA	(EE)
NY/NJ Metrostars	1660	wwru-nj	(SS)
San Jose Earthquakes		No information	ı available
Tampa Bay Mutiny	1040	WWBA-FL	(EE)
• • •	1550	WAMA-FL	(SS)

In the Montreal Gazette dated May 12, 2000 I read that the Montreal Expos still do not have an EE radio flagship; they are still looking for one. The games are broadcast only on the Internet at <<www.montrealexpos.com>>. The article hinted (but did not explicitly state) that the FF broadcasts are on 730 CKAC-PQ.

Here is Independent League Baseball information from Bob Pietsch (e-mail).

FRONTIER

LEAGUE

<<www.frontierleague.com>>

Canton Crocodiles Information is unavailable. Chillicothe Paints Information is unavailable. Cook County Cheetahs Information is unavail-

Dubois County Dragons Information is unavail- Atlantic City Surf 1450 WFPG-NI

Evansville Otters Information is unavailable. Johnstown Johnnies Information is unavailable. London Werewolves 94.7 CHRW-ON Richmond Roosters Information is unavailable. River City Rascals 590 KFNS-IL 100.7 KFNS-MO * 104.5 KSLO-MO

Springfield Capitals 1450 WFMB-IL

NORTHERN

LEAGUE

<<www.northernleague.com>> Adirondack Lumberjacks Information is unavail-

Albany-Colonie Diamond Dogs Information is Albuquerque Dukes 1150 KDEF-NM unavailable.

Allentown Ambassadors Information is unavailable.

Catskill Cougars Information is unavailable. Duluth-Superior Dukes Information is unavail- Fresno Grizzlies (SS) 1600-KGST-CA able.

Elmira Pioneers Information is unavailable. Fargo-Moorhead Redhawks 1280 KVOX-MN Les Capitales de Quebec Information is unavail- Nashville Sounds 560 WNSR-TN able.

Madison Black Wolf Information is unavailable. New Jersey Jackals 1250 WMTR-NJ St. Paul Saints 630 WDGY-WI Schaumburg Flyers 930 WAUR-IL Sioux City Explorers 1360 KSCJ-IA Sioux Falls Canaries 1230 KWSN-SD Waterbury Spirit 1320 WATR-CT Winnipeg Goldeyes 680 CJOB-MB

WESTERN

<<www.westernbaseball.com>> Chico Heat 1290 KPAY-CA Feather River Mudcats 1600 KUBA-CA Solano Steelheads Information is unavailable. Sonoma County Crushers 89.1 KBBF-CA Tri-City Posse 1340 KTCR-WA Valley Vipers 960 KCTK-AZ Yuma Bullfrogs Information is unavailable. Zion Pioneerzz 1450 KTSP-UT

TEXAS LEAGUE <<www.txproball.com>> Alexandria Aces Information is unavailable. Amarillo Dillas Information is unavailable. Greenville Bluesmen Information is unavailable. Jackson Diamond Kats Information is unavail-

Lafayette Bullfrogs Information is unavailable. Ozark Mountain Ducks Information is unavail- AAA International League able.

Rio Grande Valley White Wings Information is Charlotte Knights 610 WFNZ-NC

unavailable.

San Angelo Colts Information is unavailable.

ATLANTIC

LEAGUE

<<www.atlanticleague.com>> Aberdeen Arsenal Information is unavailable.

Bridgeport Bluefish Information is unavailable. Diamonds, Long Island Ducks Information is unavailable.

Lehigh Valley Black Information is unavailable. Nashua Pride 1590 WSMN-NH Newark Bears 89.5 WSOU-NJ Somerset Patriots 1450 WCTC-NI

Ken Onyschuk sent me this Minor League information; he does not say if the information came from the "Baseball America Almanac".

AAA Pacific Coast League

Calgary Cannons none Colorado Springs Sky Sox 1240 KRDO-CO Edmonton Trappers 930 CJCA-AB Fresno Grizzlies (EE) 1340 KCBS-CA Iowa (Des Moines) Cubs 940 KXTK-lA Las Vegas Stars 920 KBAD-NV Memphis Redbirds 560 WABQ-TN New Orleans Zephyrs 1350 WSMB-LA Oklahoma City Red Hawks Information is unavailable. Omaha Golden Spikes 1490 KOSR-NE

Sacramento River Cats 1320 KCTC-CA

Salt Lake City Buzz 1320 KFNZ-UT

Tucson Sidewinders 990 KTKT-AZ

Tacoma Rainiers 1180 KLAY-WA

Midwest League

LEAGUE Beloit Snappers 1490 WGEZ-WI Burlington Bees 1490 KBUR-IA Cedar Rapids Kernels 1600 KCRG-IA Clinton LumberKings 1390 KCLN-1A Dayton Dragons 1290 WHIO-OH Fort Wayne Wizards 1380 WONO-IN Kane County (Geneva) Cougars 95.9 WKKD-1L Lansing Lugnuts 1240 WIIM-M1 Michigan (Battle Creek) Battle Cats 930 WBCK-MI Peoria Chiefs 1350 WTAZ-IL Quad City River Bandits 1270 WKBF-IA South Bend Silver Hawks 92.1 WHVO-IN

> WOOD-MI Wisconsin (Appleton) Timber Rattlers 1050 WJOK-

> West Michigan (Comstock Park) Whitecaps 1300

Buffalo Bisons 1520 WWKB-NY

Columbus RedStixx 103.1 WSMZ-OH
Durham Bulls 620 WDNC-NC
Indianapolis Indians 1310 WTLC-IN
Louisville RiverBats 970 WLKY-KY
Norfolk Navigators 1650 WHKT-VA
Ottawa Lynx none
Pawtucket Red Sox 790 WSKO
Richmond Braves 910 WRNL-VA
Rochester Red Wings 1180 WHAM-NY
Scranton/Wilkes-Barre Red Barons 1400 WICK-

Syracuse SkyChiefs 620 WHEN-NY Toledo Mud Hens 1470 WLQR-OH AA Southern League

Birmingham Barons 1070 WAPI-AL
Carolina (Zebulon) Mudcats 98.5 WSAY-NC
Chattanooga Lookouts 98.9 WQMT-TN
Greenville Braves 104.9 WCCP-SC
Huntsville Stars 1400 WTKI?-AL
Jacksonville Suns 600 WBWL-FL
Mobile BayBears 105.5 WNSP-AL
Orlando Rays none
Tennessee (Kodak) Smokies 950 WSEV-TN
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The Wellbrook K9AY Antenna: A User's Review By John Bryant

The Wellbrook K9AY Antenna consists of two chassis mounted in substantial plastic boxes: the Operator's Unit and the Antenna Head Unit. The user supplies the necessary wire loops, mast, leadins, etc. to create the complete classic "Christmas tree-shaped" K9AY antenna. The Operator's Unit provides a rotary Nulling Control and a five position rotary switch for changing beam-direction of the antenna through the four cardinal points and an omni-directional setting which engages both loops. This latest model of the Operators Unit also includes a toggle switch for engaging/disengaging the low noise amp and a small red LED indicating whether 12 vdc. power is applied to the unit. The rotary switch (instead of two toggles), the switching capabilities of the amp and the LED are all welcome additions to what was already a user-friendly product.

ANTENNA CONFIGURATION

My current installation of the Wellbrook K9AY employs an imported black telescoping fiberglass mast produced by German radio amateur, DK9SQ, which rises to 33 feet when fully extended. I have installed guys at mid-mast height and my loops, which are equilateral with 28 feet per side, are attached at the 26 ft. height of the mast. The Antenna Head Unit is mounted approximately three feet off the ground. My grounding system is composed of ten 18 in. long metal rods surrounding the base of the mast in two concentric rings. The outer ring is about three feet in diameter. My grounding situation here in Oklahoma is very good, with the rods going directly into moist clay soil. I erected the loops parallel to my two 500 ft. long Beverage antennas, which run approximately 90 degrees to each other. This was primarily done so that I might compare, as nearly as possible, apples to apples and oranges to oranges between the two antenna systems. I should note that the beverage wires run no closer than 75 feet to the K9AY and I maintain both ends of the beverages in a grounded condition while using the K9AY. I do not believe that there is any significant coupling between the two antenna systems.

GENERAL OPERATION AND EFFECTIVENESS

Wow!!! I am deeply in love with the Wellbrook K9AY! After five months of use, I am still continually amazed at the directional capabilities of the antenna, especially on the broadcast band. Despite my now rather extensive experience with this antenna, I still find it hard to believe that an antenna that can be fit in a 30 foot cube of space can perform SUBSTANTIALLY better than 500 foot terminated Beverages on medium wave. It does. While Wellbrook make no claims of directional characteristics at much above the broadcast band, I can usually detect mild directional characteristics as far as the upper extent of the 60 Meter band - 5.100 MHz. The directional characteristics on 90 meters - 3.3 MHz- are quite pronounced, being clearly evident on signal after signal.

LONG WAVE

I am not really an expert at DXing low frequency signals. I loaned the K9AY to Bill Bowers, one of the leaders of the North American "lowfer" hobby, for about two weeks so that he might evaluate that aspect of it. He was quite impressed and has reviewed it in a recent Lowdown, the journal of the LWCA. While the antenna was at Bill's, we spent a couple of hours making front-to-back ratio measurements on both MW and long wave. Since my interests are primarily in MW and SW right now, I left my notes on long wave for Bill's use. However, we were achieving nulls of about 20 dB quite easily. A CAUTION: We were measuring these "nulls" on Non-Directional Beacon channels; there was usually another beacon in the "null" of the dominant beacon. I would guess that the absolute nulls were running more nearly 30 dB. In any case, though, the directional characteristics on long wave were very significant and enabled us to hear two separate NDBs on the same channel quite well, when they separated by either 90 or 180 degrees of azimuth. I would guess that any "lowfer" who chases NDBs and who has not yet experienced DXing with a true cardioid pattern antenna will feel that he has an entire new hobby as soon as he tries this K9AY.

MEDIUM WAVE

My primary interest in the K9AYantenna is for use in DXing international medium wave signals from the North American NW Coast during my visits there in the summertime. There, we use 1000 to 1500 ft. Beverages to DX MW signals from across the Pacific. These long antennas limit our choice of DXing sites rather severely, since we must find property which is accessible for a specific distance back from the beach and yet is an isolated enough location that tourists and local people won't stumbled into the antennas. This spring, both Guy Atkins and I tested the Wellbrook K9AY while at our favorite

Washington State DXpedition site. We independently concluded that the K9AY performs at virtually equal levels on medium wave when compared to 1000 ft. Beverages that we normally use there.

Except for the 10 day DX pedition to coastal Washington, my MW DX testing of the K9AY antenna has involved attempting to DX Mexican and other Latin American signals from my home in central Oklahoma. From a this location, Latin America spreads out over almost 180 degrees of the horizon with the Leeward Islands in the Caribbean bearing about 100 degrees from me and upper Baja California bearing west at 270 degrees. Since I am almost 1000 kilometers from the Mexican border, most of my local dominant signals are from various outlets in the central part of the United States. Unfortunately, many US stations are almost perfectly "off the back side" of my box loop antennas, making a Latin-directed MW hobby very difficult from here. In a my area, most channels on the lower half of the dial are dominated by regional and national clear channel U.S. stations. Using the K9AY antenna, I can receive clear reception from at least one Latin signal on almost all of these frequencies during the early morning and early evening DX time periods. On many frequencies in the "low band" I have multiple Latin signals previously masked by 50 KW US stations. In essence, the cardioid pattern of the K9AY has given me an entirely new lease on MW hobby life here in Oklahoma. Now, if it could just grow hair on my head....

I have not DXed domestic medium wave stations since the early 1960s. However, I suspect that people who do and who have a even a small suburban lot to erect the "corner-of-the-yard" version of the K9AY are going to throw away their Viagra prescriptions and get back to a REAL hobby. An electronically rotatable cardioid pattern that works on MW and takes up very little real estate..... WOW!

While the antenna was at Bill Bowers' shack, I made quite a few front-to-back measurements on MW, using Bill's W-J HF-1000 with an outboard meter accurately calibrated in dB. Even at mid-day, it was difficult to find a signal which was "alone" (having no weaker signal in the null of the dominant.) I did manage to find three singleton stations in the low band and measured nulls in the 25 to 30 dB range. However, my guess is that there is still some residual energy from secondary stations or even adjacent channel stations that partially infilled the theoretical null. In truth, no matter the accuracy of the instrumentation, I don't think that its possible to realistically measure the depth of a null on MW in central North America outside of a giant Faraday cage. What counts for me is that I hear LOTS of stations, EASILY, that I could never hear before.

SHORTWAVE

I mentioned previously that the directional characteristics of the antenna are noticeable all of the way to 5.100 MHz. I must say, tho', that the terminated beverage antennas, which are aimed directly at my favorite Tropical Band targets, prove to be superior to the K9AY on most occasions. However, since my Oklahoma beverages are over 500 feet long and require significant portions of the cow pasture in which I live, the fact that the Wellbrook K9AY works almost as well as my beverage array is really quite remarkable. In fact, the K9AY is the first antenna, other than the beverages, on which I can successfully DX the very unusual signals from Indian regional stations which may be heard here with great difficulty for about 30 minutes at dawn and dusk during the winter half of the year. Except for the beverages, no other antenna, active or passive, has done as well as the K9AY at detecting these signals. In fact, the K9AY often "hears" the Indian signals as well as does the beverage array. The only difference is the K9AY tends to hear more band noise on these frequencies than does the very narrowly directional beverage. On the international shortwave bands above 5 MHz, the K9AY performs very well. It tends to be a very quiet antenna and does, I understand, offer some possibilities of nulling local noise even on these frequencies.

What I have not done yet, nor to my knowledge has anyone else, is cut a set of loops to the proper length to operate well on 60 meters. It is my understanding that the largest circumference loop that should be used for a particular frequency is .25 of the wavelength. That would be about 49 feet or about 16 feet per side. My loop and most of the others currently in use are almost double that circumference. I look forward to some experimentation with smaller loops late this summer. Even using the oversized loops as at present, I likely would abandon my beverages entirely, even for shortwave, were it not for my interest in the DXing the very difficult weak long-range signals from the Indian Subcontinent on the lower bands. I certainly don't expect to use my beverages here in Oklahoma for MW DXing in the future. I never thought that I'd say that.

THE "ULTIMATE" K9AY ANTENNA SYSTEM?

My use of the Wellbrook K9AY antenna here in Oklahoma rather closely models my use in the Pacific Northwest. In both cases, the DX signals of interest come from about 180 degrees of the horizon, while interfering signals almost all come from the back-side half-circle. Given that the deepest null of a cardioid pattern is fairly narrow, I began wondering if having four loops (eight directions) with one antenna for each 45 degrees of azimuth would be useful in real DXing situations. Despite

laying myself open to further charges of obsessive/compulsive disorder, I figured that the additional cost would be worth it, if I could benefit from the additional directional choices at least ten percent of the time. Andy Ikin of Wellbrook was kind enough to provide me with an Operators Unit that can control two separate Antenna Head Units... one for each two loops. (All four loops are mounted on the same mast, making a nice Christmas tree.)

My only formal test of the 8-way vs. the 4-way system consisted of two pre-dawn hours DXing Mexican MW stations from here in central Oklahoma. I checked 12 different frequencies, most below 1000 kHz. Of those 12, having a choice at 45 degrees was a significant advantage on nine of the channels. The three where it "was not an advantage" were all stations which so dominated their frequencies that they were totally dominant through 135 degrees of azimuth or so.

On the 9 channels where the 45 degree choice made a difference, it was ALWAYS the advantage of achieving a more complete null on the dominant signal to be able to hear the desired signal more clearly. It also seemed that this extra nulling capability was the most useful when trying to ID a station in the very worst pile-ups.

Assuming that the stations were evenly distributed around the horizon, the above leads me to believe that the extra two loops would make a difference on about 40% of my DX targets. In subsequent months, that 40% to 50% has proven to be the case. GOOD ENOUGH FOR ME.

My findings make sense for people who DX MW, with the dense pile-ups coming from all angles of the compass. The cardioid pattern has a fairly sharp null and a very wide, more than semi-circular peak. I would guess that lowfers who DX NDBs would also find the extra nulling control an advantage, though I don't know by how much.

OTHER NOTES

Both Bruce Portzer and I noticed a distinct directional "peak" in sensitivity while on our DX pedition. This was quite unexpected. The published horizontal (or azimuthal) sensitivity patterns of the K9AY antenna indicate a broad, even front lobe of almost 270 degrees of azimuth mated to a very sharp veeshaped rearward null. That matches what we were hearing, except on weak signals which were otherwise in the clear. Sometimes, these stations were significantly stronger on just one wire. Since the wires were only 45 degrees apart in azimuth, that really shouldn't have been happening. This effect was most noticeable on the 5 or so Russian long wave stations that we logged. Whether this was a unique effect of our superb ground plane or beach-front location, or whether this peak has been missed by DXers who are limited to only four directional choices, we had no way to determine. As other DXers with four-loop arrays gain experience, we should all be alert to this phenomenon.

Concerning the 4-loop array coupled with the DK9SO antenna mast: the extra weight and downward tension from the extra two loops has caused my telescoping fibreglass mast to partly re-telescope during two of our storms here in Oklahoma. I had no such trouble when only two loops of 20 ga. wire up. After having the same thing happen the first night on the Washington coast, I secured each joint of the telescope with a stainless steel hose clamp. Problem solved.

I should also note that the experience with K9AYs at the Newfoundland DXpeditions, while good, do not appear to have been quite so wonderful as mine. My guess is that differing ground conditions may be to blame. The ground plane in Oklahoma was excellent: very moist clay. The ground in Washington was even better: Sandy soil completely saturated with brackish seawater. Ground conditions at the site in Newfoundland are a mixture of dry sandy soil and rock, as I remember. I am unsure whether the K9AYs in Newfoundland were amplified, as is the Wellbrook version. The Wellbrook amplifier seems to not be needed much when doing domestic/Mexican DX here in Oklahoma, but it made a world of difference in hearing weak trans-Pacific signals on the Washington Coast. Also, Jean Burnell noted that their 2500 foot beverage was always superior (on MW) to any other antenna for the direction in which it was pointed. I'm sure that is true. I don't ever expect to entirely give up my addiction to beverage antennas. When I have the opportunity to string out at least 1500 or more feet of wire toward an area of interest, I'm certainly going to do so unfortunately, those opportunities are very rare, even here in the world's largest cow pasture.

CONCLUSION

The K9AY antenna as produced by Wellbrook Communications is a marvelous antenna for medium and long wave DXing. Even though I have not used a K9AY antenna cut for shortwave frequencies, my medium wave version is second only to my 500 foot beverage antennas when DXing the

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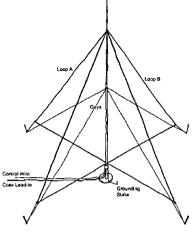
URL http://www.wellbrook.uk.com

The proprietor of Wellbrook is Andy Ikin and he is one of the "good guys."

Andy Ikin e-mail sales@wellbrook.uk.com aikin@globalnet.co.uk

The DK9SQ telescoping mast may be obtained in North America at:

http://www.bright.net/~kanga/kanga/dk9sq.htm



TYPICAL K9AY ANTENNA INSTALLATION

This version is cut for MW and LW, with each of the two loops being 25 feet on a side, Here, the wire of the loops themselves are also used as the upper support guy wires for the contral mast. The lower, mid-tevel support guys are also anchored to the heavy tent pegs. The peak of the loops rises to 26 feet, if the control box is at 3 feet above the ground.

CART (Championship Auto Racing Teams) Network By <<thefarmer3@juno.com>>

This month I'll focus in on one of the "open wheel" divisions of motor racing—the CART (Championship Auto Racing Teams) series. As you can see below, their network isn't nearly as widespread as MRN, which appeared in this space last month.

I'd appreciate any comments, suggestions, etc. you'd like to send along. Coming in the next issue: the Indy Racing League and PRN affiliates (and the true identity of "thefarmer3"! -pls.)

Frequency	Station	City State/Pro	<u>ovince</u>	1320	WAMR	Venice	FL	
590	KFNS	St. Louis	MO	1400	WMAN	Mansfield	OH	
	CJCL	Toronto	ON	1430	WMYS	Indianapolis	IN	
620	WTRP	LaGrange	GA	1440	KVON	San Francisco	CA	
790	WAEB	Allentown	PA	1460	KENO	Las Vegas	NV	
870	WIEV	Los Angeles	CA		WBNS	Columbus	OH	
960	KCTK	Phoenix	ΑZ	1490	WNTJ	Johnstown	PA	
1010	KGUY	Portland	OR	1510	WAUK	Milwaukee	WI	
1040	CKST	Vancouver	BC	1550	WAUX	Waukesha	WI	
1140	KYOK	Houston	TX	1700	WAFN	Miami Springs	FL	
1150	KDEF	Albuquerque	NM					
1160	WBOB	Cincinnati	OH	Programs: CART Hotline				
1240	KADS	Elk City	OK	Lead Announcer: Larry Henry				
1300	WERE	Cleveland	OH	For the complete race broadcast schedule, check				
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The Palstar R30 General Coverage Receiver A Review from a MW Dxer's Viewpoint by Gerry Thomas

When I first caught a glimpse of the new Palstar R30, I was intrigued. Here was a very small (for a desktop rx), \$500 radio with none of the bells and whistles that usually adorn serious and wannabe serious receivers in the \$500-\$1000 price range. There was no keypad, no synchronous AM detection, no passband tuning, no notch; not even a tone control. All of this was fine with me because while the aforementioned (missing) features could make life easier for the Dxer, they were by no means absolutely necessary for hearing tough DX. Maybe this manufacturer, Palstar, had put its money into the more important stuff—good sensitivity and selectivity, an above average front end, and solid stability (for good exalted carrier selectable sideband (ECSS) performance).

When Palstar sent me a block diagram of the R30, I was impressed...someone knew what they were doing...seven-pole filters in the front-end filter bank, a doubly balanced very low noise JFET mixer, discrete MOSFET IF amps, even a nice roofing filter (8 kHz bandwidth) at the 45 Mhz first IF. The audio amp also seemed impressive—3-4 watts with very low distortion. The only potential trouble spot I saw was the single-loop frequency synthesis system. Poorly executed single loops often are plagued by excessive phase noise which leads to reciprocal mixing problems which result in Iousy ultimate IF selectivity. Only a hands-on run-through would tell though.

General Description

The R30 covers 100kHz-30MHz and is the first receiver offering from Bramco Palstar (of Piqua, OH), a company previously limited to manufacturing, among other things, amateur radio accessories (e.g., tuners, filters). (Bramco Palstar also makes the Lowe HF-350, which is the R30 for the European market; the only difference is a 4kHz wide IF filter instead of the 6kHz American standard.)

Right out of the box I was struck by the R30's clean lines and small size (three or four R30's could fit in a Drake R-8 cabinet). The cabinet is heavy sheet metal (black crinkle top, gray bottom) and measures 8.26" x 2.56" x 7.68"; weight without batteries is 2.2 lbs. A very heavy duty chromed tilt bail allows upward tilting of the front of the radio and the front panel knob count is, uh, two: A 1-3/8" tuning knob with speed dimple and an on/off/volume knob. Seven BB-sized push buttons control memory (there are 100), mode (AM, LSB, USB), attenuator (10 dB), bandwidth (wide/narrow), AGC (fast/slow) and, to the right of the main tuning knob, up/down jump tuning. Eventhough the push buttons are small, they are well spaced so there is little chance of a "double push." Small red LEDs above the non-tuning buttons indicate button status. The LCD digital display has one-inch numerals and the frequency is displayed to 100 Hz; a switch on the back of the radio turns on the display light. An analog S-meter and 1/4" headphone jack round out the front panel.

The rear panel is pretty conventional with the standard 50 Ohm (SO239) and high impedance compression terminals. Audio outputs include a 1/4" external speaker jack and an RCA "line" jack for recording as well as another RCA "mute" jack (for use with transmitters). Besides the aforementioned display light on/off switch, and a DC input jack, another jack is a DC output jack which is used for powering Palstar's optional outboard antenna tuner/preselector (Model AA30).

Operating the R30

Operating the R30 is pretty straightforward, although the multi-talented tuning knob requires a little bit of practice to become comfortable with. The tuning knob has two tuning *rate* ranges. In the "slow" mode, rotating the knob slowly tunes the radio in 20 Hz steps (adequate for SSB reception); rotating the knob more quickly shifts the tuning up to 100 Hz steps (one full knob rotation therefore changes from 2 kHz per rotation to about 8 kHz per rotation). A similar variable tuning rate scheme occurs with the "fast" tuning mode: 100 Hz per step changing to 500 Hz tuning steps. This works out to about 10 kHz/full knob rotation up to 20 kHz/a full rotation. Changing between the two speed modes occurs when the tuning knob is pushed in and released (there's tactile feedback but no indicator light). In addition to tuning, this knob walks through the memory channels (after the MEM button is pressed). Holding the knob in for 2 secs disengages the tuning if you want to lock on a frequency.

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Tuning in larger jumps is accomplished by pressing the up/down buttons to the right of the tuning knob. These buttons nominally jump in 1 Mhz steps *but see R30 Sample #2 below*. The 100 non-volatile memories are selected by either the tuning knob or the up/down buttons. The rest of the controls on the front panel are intuitive.

The Circuit

The R30 is a double conversion superhet with a 45 Mhz first IF and a 455 kHz second IF. A seven-pole filter bank with six ranges (.1-1, 1-2, 2-4, 4-8, 8-16, 16-30 Mhz) provides front-end selectivity. After a selectable 10 dB attenuator and 30 Mhz low-pass filter, RF and VCO frequencies (UHF/8) are mixed in a low-noise, doubly balanced JFET mixer to provide the 45 Mhz first IF which is passed through a four-pole 45 Mhz (8 kHz BW) roofing filter before MOSFET amplification. The second mixer (MOSFET) provides the 455 kHz signal to one of the two selected IF filters (muRata ceramics or Collins mechanicals; 6 kHz and 2.5 kHz; the muRatas are the higher grade CFR series (9-pole, I think) and the Collins filters are the new, compact torsional designs). AGC occurs after the second IF and rectification/product detection follows. Audio amplification is a fairly hefty 3-4 watts with very low (reported <1%) total distortion. Audio output is into a 3-inch top-mounted speaker (unfortunately rated at 800 mW).

Circuit lay-out is generally good with robust shielding and construction techniques. The majority of supporting components are those surface mount beasties (that make for compact radios but drive tinkerers nuts).

Sensitivity on the latest models is reported to be .5 uV throughout the tuning range on AM, and .3 uV on SSB. The shape factor on the Collins filters is reported to be (and seems to be) quite good (i.e., <2:1).

All in all, the R30 seems to be a well-designed, ruggedly built receiver.

A Tale of Two Samples R30 #1

The first R30 I received showed very commendable overall performance but was plagued by a couple of problems. First of all, 60 Hz harmonics wreaked havoc on the LW and MW bands (much less so on SW) making serious DX impossible. Switching the power source from the supplied outboard adapter to a 12 VDC battery or a filtered Radio Shack adapter cured the problem. A call to Palstar revealed that, indeed, the supplied adapter was unfiltered. Palstar called back with the fix (.01 uF caps across the rectifier diodes) and now supplies filtered adapters with the R30. The second significant problem turned out to be a manufacturing flaw. I noticed that the ultimate selectivity of both Collins filters was not what it should have been. That is, sideband splatter from strong adjacent stations was more prevalent than I thought it ought to be given the circuit lay-out and the Collins ultimate rejection specs. I expected ultimate rejection in the 70-90 dB range but was hearing rejection in an estimated 50-60 dB realm. Was this the reciprocal mixing that I had feared might be present due to the single-loop frequency synthesis scheme? Palstar maintained that the phase noise (the cause of reciprocal mixing) in the R30 was very low and that something else must be causing the problem. Another problem that I encountered was the anomalous, image-like appearance of strong locals exactly 8 kHz, 16 kHz, 24 kHz, etc. above and below the station's carrier frequency. That is, for example, local WBSR-1450 was audible on 1458, 1466, 1442, etc. Clearly, something was wrong with this sample and Palstar asked that I send it back for a check-out.

What I was able to conclude from my limited testing of R30 #1 was that it was more sensitive than either the Drake R-8 or the Japan Radio NRD-535D on all bands and that its audio was a joy to listen to. Drawbacks were limited to wishing that a smaller step than 1 Mhz was available with the up/down buttons (going from 1000 kHz to 1500 kHz took a lot of knob spinning (which I remedied by setting MEM locations 5-17 to 540, 600...1700 kHz)) and better ultimate selectivity. I also wished that the signal level on very weak ECSS-received signals was a little higher.

R30 #2 What a difference!

When Palstar returned the R30 (the same one I originally had), the ultimate selectivity/anomalous image problem was gone. Paul at Palstar told me that the problem was that a blob of the alloy used for mounting the surface mount components had apparently splattered during assembly and had caused the problem. Now, a quick listen showed very good ultimate selectivity and no images. As a bonus, THE UP/DOWN BUTTONS NOW JUMPED IN 500 KHZ STEPS INSTEAD OF 1 MHZ...Infinitely better! Finally, the supplied AC/DC adapter had been fitted with filter caps and was now noise-free....time to run some comparison tests.

When Palstar first agreed to supply an evaluation unit, I had hoped to compare it to both the new Grundig 800 Millennium and the Yaesu FRG-100B, two radios in the same price range as the R30. Unfortunately, the Grundig still hadn't been released and the Yaesu had been recently discontinued.

After a quick evaluation of the first sample R30, I came to the conclusion that it would be appropriate to compare it to some higher-end rigs. Therefore, I used my usual Drake R-8 and Japan Radio NRD-535D for performance comparisons.

Performance

Test Set-up

Although I have the equipment to perform laboratory measurements of receivers, I have usually found careful "real world" listening tests to be more useful in determining a rig's DX-ability. Therefore, the three receivers were tested using either a 150' inverted-L wire antenna or a Quantum Loop MW ferrite rod antenna. An MFJ antenna switch box allowed quick A-B-C comparisons. Most MW comparisons were conducted during mid-day (when sensitivity differences could more easily be determined) and the cursory LW and SW sessions occurred during both daylight and nighttime hours.

The Radios

Palstar R30 This was sample #2 and was fitted with the two Collins IF filters. It was also production "Revision H" (plus the circuit changes that were made during the course of my review).

Drake R-8. This is the first version of the respected R-8 series and has five IF filters (up to four useful for voice signals), synchronous AM detection ("synchro"), passband tuning (PBT), notch filter, noise blanker...all the bells and whistles. This is one of my two preferred desktop rigs for serious MW DX and is rated 5-stars by almost everyone. The pre-amp, however, is not operative on MW on this model. Original price of this radio was about \$800; current models are just under \$1200.

NRD 5.35D This was Japan Radio's top-of-the-line semi-professional receiver until very recently. Besides having the same bells and whistles as the Drake, this "D" model also came with a 2 kHz narrow filter and a 4 kHz wide filter. It also had a variable bandwidth control ("BWC") that could further narrow some of the resident IF filters. This is 5-star receiver with an original price of \$1799.

Sensitivity

It is one thing to measure sensitivity in a laboratory setting with spectrally pure signals under carefully controlled conditions and quite another to hook up a broadband antenna feeding thousands of signals to the front-end. This is particularly true in the MW band where RF pollution is rampant. For these comparisons I intentionally chose very difficult-to-hear stations that were not being bothered by interference from nearby stations.

For the record, on MW, the R30 specs report a .5uV sensitivity on AM; .3uV on SSB. By comparison, the 535D's specs read 6.3uV on AM and 2uV on SSB; and the Drake states <3.0 uV, AM and <1.0 uV, SSB. (It should be noted that ionospheric/atmospheric noise levels on MW rarely get below 3uV so values below that are, theoretically, of limited value.) Sensitivity specs for SW were much more comparable although the R30 still held a slight edge, for the most part.

Rating Scale

- 5—Local-like (all background noise "quieted)
- 4—Easily readable but not local-like
- 3-Readable with effort
- 2—Intermittently readable
- 1-Present but not readable
- 0-Not detectable

Target Stations

540 kHz WQTM	Pine Hills, FL This is a 50 kWer about 350 miles to the southeast.
720 kHz WRZN	Hernando, FL A 10kWer about 300 miles to the southeast.
950 kHz R. Reloj	Sancti Spiritus, Cuba Reported to be 1-5 kW at 750 miles.
1680 kHz WTIR	Winter Park, FL. A 10 kW station about 350 miles to the southeast.

		<u>"Long-V</u>	<u>-Wire" Results</u>		
	<u>R30</u>	<u>R8</u>	<u>535D</u>		
540 kHz	1.5	1.0	1.0		
720 kHz	.5	0	0		
950 kHz	2.0	2.0	2.0		
1680 kHz	2.5	2.5	2.5		

The differences between the three radios were so small as to be virtually insignificant. With these

extremely tough signals (which were necessary to show any difference at all), the R30 exhibited marginally better sensitivity on the low end. Perhaps the most telling was WRZN-720 where some audio was detectable (but not readable) on the R30 but not on the other two. Let me rush to state, though, that the preceding ratings were gathered on one atmospherically fairly quiet spring day that happened

to occur in the middle of my testing. I have pages of comparisons on less quiet days where there were no rateable differences between the three radios at all, which caused me to scratch my head a little. I remembered that my brief testing of R30 #1 showed a more pronounced superiority in sensitivity and wondered if, perhaps, Palstar had knocked down the R30 #2's sensitivity a bit. I even hooked up all three radios to an antenna tuning unit thinking that maybe input impedance mismatches were causing the virtually identical ratings...there was no change in the relative performances. Then I realized that my original tests of R30 #1 had taken place weeks earlier during an unusual period of low ionospheric/atmospheric noise. Maybe the higher noise now was acting as the great equalizer. After all, a man with 20/20 vision has no real advantage over a lower-vision man if both are trying to see into a fog bank. With this thought in mind, I decided to re-run the sensitivity tests using a tuned loop antenna. A tuned loop is inherently quieter because of its narrower bandwidth and its response to only the magnetic portion of the RF wave. The loop I chose, of course, was the Quantum Loop.

Loop Results

	<u>R30</u>	<u>R8</u>	<u>535D</u>
540 kHz	3.5	2.5	2.0
720 kHz	3.5	2.5	2.0
950 kHz	1.5	1.0	1.0
1680 kHz	3.0	2.5	2.0

Aha! This was more like I remembered the R30#1 performing and the results are a little startling. Across the band, the R30 gave stronger, more readable signals. This is due not only to, I suppose, somewhat better raw sensitivity but also to better audio. The R30's signals always sounded fuller, stronger, cleaner and easier to read than the others. Note that the 535D had a slight disadvantage with the loop because its flourescent display gave off a slight hash that degraded the signal somewhat no matter how much I tried to re-position the loop (I turned off the 535D when testing the R30 and R8).

Selectivity

This is usually where the men and boys part company. Many an otherwise fine receiver falls short on this important variable and requires the installation of aftermarket, higher quality filters. The R30 comes with high quality filters (either the Collins mechanicals or the upper level muRata ceramics), so that's a good start. But compared to the R8's 6/4/2.3/1.8 khz IF filters and the 535D's 12/4/2/1 kHz filter array, filter choices are sparse. In addition, the Drake and Japan Radio offerings had passband tuning (PBT), synchronous AM detection ("synchro"), and notch controls, all potentially useful in producing a readable signal in tight quarters. In addition, the 535D was fitted with a "bandwidth control" (BWC) feature that allowed the 4/2/1 filters to be narrowed even further (but deep skirt selectivity was not good enough to reduce sideband splatter). However, having been a Dxer since way before the advent of PBT and synchro, I knew that there were ways to come close to the performance of these modern technologies by less sophisticated means. For example,

Passband Tuning—In the AM mode, you can effect about the same result simply by tuning a kHz or two away from the carrier frequency in a direction opposite the interference. (Ceramic filters are usually better for this than mechanicals because their generally less steep skirts permit tuning a little farther away before losing the carrier.) In the SSB mode (e.g., when using ECSS), when you can't tune away from the carrier without losing intelligibility, PBT can be a big plus though. "Synchro"—Synchro nous AM detection can be a real boon...sometimes, especially if you can select a sideband. With very weak signals (i.e., DX), however, oftentimes the signal is too weak to result in a lock. Other times, even with stronger signals, the results are less than spectacular. Occasionally, the gods will be smiling, and pressing the synchro button will result in a dramatically improved signal (the offering to the gods that leads to this happy occurrence remains a mystery to this Dxer, though). Results very similar to synchro can be obtained (especially with the R30) via ECSS and a slow AGC...sometimes this method on SW showed an even greater reduction in "pumping"/distortion than the synchro mode in the other radios. Notch—Tuning away from the heterodyning signal in the AM mode or switching to a narrower filter will often eliminate a het. Switching to a sideband away from the problem signal will do the same. Low frequency hets require a notch filter, however.

The point of the preceding is to say that some of the R30's potential selectivity shortcomings can be

overcome, to varying degrees, by using careful tuning techniques.

In the selectivity comparisons that follow, I pulled out all the stops for each radio to produce the best possible signal, using whatever trick, technique, or control available.

Rating Scale

- 5—Clear
- 4-Minor sideband splash
- 3—Heavy sideband splash
- 2—Intermittent readability due to splash
- 1—Target never readable under splash
- 0—Target not detectable under splash

Target Stations

Even though several stations were used to evaluate the selectivity measure. I'm going to cite just three that are representative of the testing. The antenna used for this test was the Quantum Loop but nulling was not possible in any of the situations.

590/591 kl1z WDlZ Panama City, FL/Santa Clara, Cuba. The Cuban was off frequency again affording an opportunity to check close-in selectivity. WDIZ puts an S-9+10 signal into Pensacola while the Cuban is much weaker (reported power at 10 kW). A 1 kHz het was audible.

1000 kHzWDXE Robertsdale, AL. This 1kWer about 50 miles W is usually severely bothered by local splasher WRNE-980.

1440 kHzWRBE Lucedale, MS. Next to local WBSR-1450, this one is tough to hear clearly.

	Selectivity Results					
	<u>R30</u>	<u>R8</u>	<u>535D</u>			
590 kHz	4.5 (het) [AM/6]	EO[AN4/6/motel	1] 5.0 [AM/4/notch]			
590 KHZ			5.0 [LSB/2.0]			
	5.0 [LSB/2.5] 5.0*	5.0 [LSB/2.3]	5.0 [LSD/2.0]			
591 kHz	3.0 [USB/2.5]	3.5 [USB/2.3/PB]	Γ]3.5 [USB/2.0/PBT]			
1000 kHz	3.0 [AM/6]	3.2 [AM/4]	3.2 [AM/4]			
	3.5 [USB/2.5]	4.0 [USB/2.3/PB]	T]4.0 [USB/2.0/PBT]			
1440 kHz	1.0 [AM/6]	1.0 [AM/4]	1.0 [AM/4]			
	3.5 [LSB/2.5]	3.5 [LSB/2.3/PB]	[]4.0 [LSB/2.0/PBT/BWC]			

[] = Mode/Filter width/Other controls used

The het on 590 kHz was eliminated by using either the notch filter on the R8 or 535D or by switching to LSB on any of the radios. Tuning to 587.3 kHz in the AM mode also eliminated the het. Trying to hear the Cuban on 591 kHz was valuable in that it provided information for those of us who DX the foreign split frequencies. I was amazed to get any readable audio at all but all three radios produced a readable signal using ECSS, the PBT aiding clarity somewhat. PBT in the ECSS mode proved of use again on WDXE providing a very slightly cleaner signal than the R30. WRBE-1440 illustrates the slight contribution of the BWC on the 535D. Using just about the whole array of available tools, the BWC allowed the 535D to nudge ahead of the others by cleaning up the signal just a little bit more.

With regard to selectivity, then, the R30 with its quality Collins filters showed that it belonged in the same league as the R8 and 535D. It was never better than either radio but when it was worse, it wasn't worse by much. And I never encountered a case where the R30 failed to produce intelligible audio when the others were producing a readable signal. Also, eventhough the filters on the R30 are selectable independent of mode, I always found that using ECSS produced a better signal than the narrow Collins in the AM mode. It is also clear from the preceding results that having PBT available for use in the ECSS mode is of value and that it is largely responsible for the R8's and 535D's slight superiority in some situations.

Dynamic Variables

Frequency stability on the R30 is rock solid. Drift is virtually nil after a very brief warm-up; ECSS signals stayed dead-on for hours. Dynamic range is reported to be >90 dB (but at 50 kHz) and the third-order intercept point is specified as +15 dBm (at the standard 20 kHz spacing). 1 experienced no overloading problems at my location while using the 150' antenna but would be anxious to see how well the R30 does with a mile-long Beverage antenna. (I wouldn't be surprised if the R30 did quite well with a Beverage given its lack of an RF amplifier, JFET first mixer, and reported third-order inter-

^{*} AM mode tuned to 587.3 kHz

cept point.) Spurs/images have been reported to be present but I encountered none that interfered with my listening. Speaking of images, while checking out the R30 on the tropical band, I tuned past 2480 kHz and heard American oldies music..."My first image!" I thought. Wrong. It was a harmonic of KDGO-1240 Durango, CO (and was audible on all three radios).

Performance on the Other Bands

I didn't spend a lot of time on LW but when I did venture down there, I noted a hefty supply of beacons. Given the fact that Palstar didn't reduce the sensitivity in this range, I would expect the R30 to be pretty hot on LW. On the tropical bands, the R30 always seemed to provide signals with a greater "presence"—stronger, cleaner than the other radios...WWV-2500 kHz seemed like it was in the room with me instead of locked in the radio...(I'm sorry, but that's the best way I can explain it, hi). Program listening on SW was very good with the 6kHz filter but I found that I preferred the 2.5 kHz Collins in the ECSS mode with a slow AGC setting...audio was smooth with a minimum of fading and distortion. I particularly liked the R30 on the HF utilities. Audio, again, was cleaner and the R30 seemed to have a sensitivity advantage (eventhough specs were much closer than on MW). For example, while listening to transatlantic flights working ground stations, several times I was able to hear the transmissions of really distant planes on the R30 but not on the other two radios. The R30 became my favorite radio for long-term channel monitoring.

Audio Quality

This is one of the R30's strong points and is mainly responsible for my preferring it for extended listening sessions. Even with the little 3" speaker, the audio sounds inexplicably full and clean. Unfortunately, as noted earlier, the 3-4 watt audio amp is feeding its signal into a speaker with a maximum power rating of 800 mW so distortion can occur if you crank up the volume control. An external speaker, however, can fill the room. The only radio that sounded better was the 535D when it was in its 12 kHz IF position and using its external speaker. The highs were sparkling and the sound was full. With a 12 kHz bandwidth though, this combination can only be used on stations in the clear.

Battery Life

The R30 runs on 12 VDC (via adapter) or on 10 AA penlight batteries mounted internally. I measured its current drain at about 300 mA with the display light off and about 500 mA with the light on (at normal listening levels). With the 10 fresh alkalines yielding 15+ volts, the question was, "What was the minimum operating voltage of the R30?" After seven hours of continuous play, a barely discernable audio distortion occurred; this at 10.2 V. After 8-1/2 hours, the voltage had dropped to 9.14 V, and within minutes the R30 went silent. Performance was virtually unchanged until seconds before it died. So, the operating voltage range of the R30 is about 9-15 VDC and a fresh set of alkalines should last about 8-9 hours; enough for one, long DX session. The new, high capacity NiMH penlights offer a viable, and cheaper in the long run, alternative to the alkalines since the R30 runs great all the way down to about 10 V.

Concluding Statements

So there you have it....whew! This is undoubtedly one of the most difficult reviews I've ever undertaken. The radios were so close in DX performance, for the most part, that hours and hours were spent searching for situations that could differentiate among them. In the end, though, I think I can conclude that the Palstar R30 (in its most recent version) has great potential for digging out that tough DX, especially on those ultra-quiet winter nights that we covet so much.

As I see it, the R30 will appeal to two opposite ends of the radio hobbyist spectrum. Serious Dxers and DXpeditioners will appreciate the R30's tough signal performance and small size. Novices and those intimidated by knob and button arrays will select the R30 for its simplicity. I think that both groups will be satisfied with their choice. But if you want the latest and greatest gizmos and doodads in your radio...look elsewhere. Palstar put its money where it counts, in performance; and I put my money where my mouth is...after completing this review, I bought an R30.

The Palstar R30 is presently available in three configurations:

- 1. R30 with muRata 6kHz and 2.5 kHz IF filters—\$499.95
- 2. R30 with muRata 6kHz and Collins 2.5 kHz IF filters—\$549.95
- 3. R30 with Collins 6 kHz and 2.5 kHz filters-\$599.95

Palstar, Inc. 9676 Looney Rd., Picqua, OH 45356 (937) 773-6255 << Palstar@erinet.com>>

Note: If you decide to purchase an R30, try to get one manufactured after March, 2000. This will ensure that you will get the 500 kHz up/down tuning and the latest circuit changes. Also, beware of reviews of R30's manufactured before March, 2000.

Log Update Deadline Approaching! By Wayne Heinen

The time has come for the Club to put a little oomph behind the AM Radio Log. With all the changes in AM Radio the log is in need of your local AM input. As a DX'ing tool the Log is only as good as the membership's updated info. Your boring local pests are others DX! I have proofing reports available in a "By State" format via e-mail or snail mail. All volunteers are welcome! The deadline here in Aurora for all Log updates will be August 1, 2000; the 21st edition will be published in August for Labor Day distribution. Contact me at 4131 S. Andes Way, Aurora CO 80013-3831 or email <<nrclog@aol.com>>

Silent Stations List

							_ _		
550	WASG	Atmore	ΑL	Silent 12/99	1340	WAHH	Wilmington	NC	Silent 9/99
550	WJMW	Bloomsburg	PA	Silent 12/99	1340	WXEE	Welch	WV	Silent 1/97
600	CIQC	Montreal	PQ	Silent 5/00	1370	KCNB	Holdenville	OK	Silent 3/00
630	WMFD	Wilmington	NC	Silent 9/99	1370	WKFD	Wickford	RI	Silent 7/99
710	WEPA	Eupora	MS	Silent 10/98	1400	KIGO	St. Anthony	ID	Silent 1/00
810	KXOI	Crane	TX	Silent 3/00	1400	WALZ	Machias	ME	Silent 5/96
810	WCYK	Crozet	VA	Silent 9/99	1400	WFOR	Hattiesburg	MS	Silent 3/00
850	CKVI.	Verdun	PQ	Silent 5/00	1400	WHLF	South Boston	VA	Silent 3/99
900	WSNQ	Gaylord	MI	Silent 12/99	1420	KYVU	Yucca Valley	CA	Silent 7/92
910	WYLI	Marietta	OH	Silent 3/00	1420	WLET	Тоссоа	GA	Silent 10/99
920	WITX	Lexington Park	MD	Silent 7/98	1420	WSUH	Oxford	MS	Silent 12/97
960	WKZA	Kane	PA	Silent 6/93	1430	WLAU	Laurel	MS	Silent 1/00
980	WLUS	Gainesville	FL	Silent 12/99	1450	WCOX	Camden	ΑL	Silent 12/94
990	KXXL	Wichita Falls	TX	Silent 11/99	1450	WDLK	Dadeville	ΑL	Silent 5/00
1050	KCHN	Liberty	TX	Silent 8/94	1450	KOBO	Yuba City	CA	Silent 1/00
1080	WQRO	Huntingdon	PA	Silent 11/87	1460	WBUC	Buckhannon	WV	Silent 3/99
1090	WGOD	Charlotte Amalie	VI	Silent 10/95	1470	KKFO	Coalinga	CA	Silent 1/00
1100	WMYQ	Newton	MS	Silent 9/99	1470	WXAG	Athens	GA	Silent 8/97
1120	KLIM	Limon	CO	Silent 11/97	1470	KVLH	Pauls Valley	OK	Silent 01/00
1130	KHTH	Dillon	CO	Silent 3/00	1470	WFJY	Portage	PA	Silent 3/00
1130	KQEO	Milan	NM	Silent 1/00	1480	KKEL	Hobbs	NM	Silent 2/98
1130	WQIS	Camden	SC	Silent 9/99	1480	WPWC	Dumfries-Triangl	e VA	Silent 3/00
1150	WSPZ	Tuscaloosa	ΑL	Silent 3/00	1510	WWHN	Joliet	IL	Silent 1/00
1150	KMXN	Santa Rosa	CA	Silent 5/98	1520	KYJY	Albuquerque	NM	Silent 7/99
1150	WONG	Canton	MS	Silent 9/99	1550	WVAB	Virginia Beach	VA	Silent 01/00
1150	WSNW	Seneca	SC	Silent 9/99	1560	KDDA	Dumas	AR	Silent 1/00
1160	WMVI	Mechanicville	NY	Silent 11/99	1560	KKUZ	Sallisaw	OK	Silent 12/99
1190	KHAD	DeSoto	MO	Silent 1/00	1570	KUAU	Haiku	HI	Silent 5/99
1230	KEEE	Nacogdoches	TX	Silent 7/97	1570	WFOG	Riverhead	NY	Silent 01/00
1230	WABN	Abingdon	VA	Silent 5/00	1580	WBBA	Pittsfield	ΙL	Silent 9/99
1240	WCRW	Chicago	Π L	Silent 10/96	1580	KFQC	Davenport	IA	Silent 7/98
1250	KDEI	Port Arthur	TX	Silent 12/99	1580	WPUV	Pulaski	VA	Silent 8/98
1260	WCSA	Ripley	MS	Silent 8/92	1590	WGYJ	Atmore	AL	Silent 2/98
1270	WLSM	Louisville	MS	Silent 10/98	1590	KYDĖ	Pine Bluff	AR	Silent 3/99
1290	WCFI	Ocala	FL	Silent 1/00	1590	WEHH	Elmira Heights	NY	Silent 01/00
1300	WCOZ	St. Albans	WV	Silent 8/98	1590	WZUM	Carnegie	PA	Silent 01/00
1330	WPRN	Butler	AL	Silent 12/98	1590	WDBL	Springfield	TN	Silent 05/00
1330	KTOD	Conway	AR	Silent 7/98	1600	WAXP	Warner Robins	GA	Silent 5/99
1330	WFTO	Fulton	MS	Silent 10/98	1600	WOHZ	Wheeling	WV	Silent 01/00
1340	WAGR	Lumberton	NC	Silent 01/00			Ÿ		
								_	

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It may not be perfect ...

but the NRC AM Log is, simply, the best there is because of your contributions. Why not make the next edition even better? Send all corrections and changes to

Wayne Heinen • 4131 S. Andes Way • Aurora, CO 80013-3831, or nrclog@aol..com. Thanks!

Adding an AM FET Front End to your Low-Priced Portable AM/FM Radio by Jeff Sparks

Introduction and Background

Most available lower-priced analog-tuned radios for AM reception come with a "low-sensitivity, broadly-tuned" front end. With some modifications, you can improve the performance of your receiver, making it into a DX machine.

Typically, such radios have the following circuitry (see Diagram 1):

The circuit in Diagram 1 exhibits "broad-band" characteristics and low gain due to the "low impedance RF tap" off the AM antenna ferrite rod's coil. By modifying the circuit, we can narrow the input bandwidth and raise the "Q", or quality factor, giving us greater selectivity and sensitivity. Further improvements using regeneration may also be utilized.

We can modify our original circuit by adding an N-channel FET (field effect transistor) RF amplifier (see Diagram 2):

Notice that the RF output voltage is now "taken off" the "top" of the loopstick ferrite rod antenna coil winding, which greatly improves performance since there is a higher RF voltage referenced to ground at that location than the original "low-impedance tap" on the loopstick coil. The "input impedance" (Z in) is also greater due to the high input Z in of the FET gate, which does not "load dow" the RF-tuned circuit, 11 consisting of L1/C1a/C3/C7. One additional benefit of the FET stage over the existing IC1 front end is the further "voltage gain" (Av) provided by the FEt itself.

Regeneration

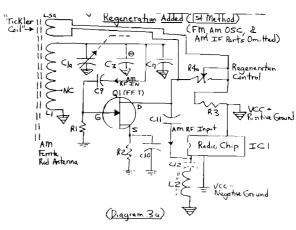
Adding regeneration to our circuit can improve amplification way above what we already added with

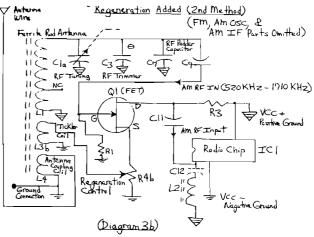
High Impedance (Coil "Top"/"Hot" End) Antenna 11 LI (Coil "Bittom" / Cold End") (520 KHz-170 KHz) Radio Chip TCI denotes "positive ground" (VCC+) TRANS Original Radio Circuit With FET RF Amplifier Added (FM, AM OSC, & High Impadance AM IF Omitted) RF INTO FET AMP (520 KHz-1710 KHz) ICI ILAM Ferrite Rod Antenna (Diagram 2)

just the FET! Regenerative feedback can increase Av by several hundred times; it also results in narrower bandwidth near the point oscillation ("further increased selectivity"). To add regeneration, we can use either of two circuit variations (see Diagrams 3a and 3b):

Operation:

Our receiver functions just as it normally would with the following additions: A station is tuned in. If we used the circuit show in diagram 3a "tickler coil" (L3q) "feeds back" some of the output signal off the FET's "drain" back "in phase" with the input signal on the FET's "gate". Variable resistor R4 ("a" or "b" – depending on whether you use the circuit in "Diagram 3a" or the circuit in "Diagram 3b") adjusts the amount of feedback provided. R4 (a or b) must be adjusted so the circuit is operating "just prior" to the point of oscillation for best performance. The circuit depicted in Diagram 3b works in a similar fashion, the exception being that the feedback signal is derived from the FET's "source" lead





(L3b), rather than its "drain". With practice, the operator will quickly learn how to "rock" the controls for bet operation.

Construction:

Due to the variety of radio models available these days, this is really a "tinkerer's project". Parts values are not absolute – wide tolerances are allowed. Experimenting with parts and hookup to achieve optimum performance is just part of the fun involved when you "roll your own" electronics project!

Existing circuit connections must be removed and parts

added, along with circuits rewired, using the outlines show. Please note that R1, R2 and C10 must go to "negative" ground." L1 may be grounded to "positive ground", which is not at zero volts DC. Connect L2 to the "same" ground point that L1 uses. In some installations, an additional capacitor "C12" may be required between L2 and IC, to avoid DC grounding the input pin of this IC.

Component leads and wiring should be kept short. Too much heat from a soldering iron can damage electronic components. Safety goggles/glasses when solder or working

with hand tools are a must. It would be a good idea to use a grounded soldering iron, and an antistatic work area mat and wrist strap to avoid electrostatic discharge (ESD) damage to the FEt or existing radio parts. Don't use acid-core plumbing solder or acid flux! Use a good rosin core electronic solder only. The smallest parts possible should be used so that the radio modifications will "fit" in the existing case. Somewhere, a mounting hole will be needed so that the regeneration control R4 (a or b) can be mounted in the radio's case.

Keep the FET RF amplifier's parts away from the local oscillation stage "T1" and the IF stage area "T2" to avoid undesired feedback (see Diagram 4)

Alignment:

A typical lower-priced AM/FM radio has the following alignment points:

It is important to obtain the best alignment possible prior to doing any of the circuit modifications suggested. This project should not greatly disturb the existing radio's alignment since near no changes in component value have been made to the "RF tank circuit" (L1, C1a/C3/C7 – running from 520-1710 kHz(or the "local oscillator circuit" (T1/C1b/C4/C8 – running from 975 kHz-2165 kHz). Please note that the local oscillator runs 455 kHz "above" that of the RF tank circuit. The difference between the RF tank circuit and the local oscillator is 455 kHz or the Intermediate Frequency (IF).

To align most any AM analog transistor radio without a tuned RF amplifier stage, first tune down to around 520 kHz. Peak the local oscillator tuning slug (T1) for maximum hiss (be careful here, fragile powdered iron-core adjustment slugs "crack" easily - use a plastic alignment tool (See parts list)). Then, tune to around 1710 kHz and peak the local oscillator capacitor trimmer screw (C4) for maximum hiss. Next, tune back down to around 600 kHz. Slide the ferrite rod's antenna coil (L1) back and

forth on the rod peaking for the most hiss or the best signal on a weak station (I like WSJS/WCAO or WDAF "61 Country" for this). Now, tune the radio to around 1400 kHz and peak the RF antenna trimmer (C3) screw for maximum hiss or "graveyard" signals. Peak the IF transformer slug (T2) on a station around 1520 kHz for best signal. This pretty much completes the alignment process, although you can probably "tweak" things out a little.

After the construction modifications are done, only a "slight" adjustment of L1 and C3 may be required. You may find that the radio's tracking has improved with the FET amplifier's narrower bandwidth, and the fact that we are now using the "top" high-impedance RF signal takeoff point on the L1 coil rather than the pre-modification "low-impedance" tap-down for signal input to the FET RF amplifier.

External Antennas: A longwire antenna or loop output can also be connected by adding coil L4 around the radio's ferrite rod if desired (See Diagram 3b). However, performance may be so good that an extra antenna is not required. A long antenna may Overload" the radio!

Other antenna improvements can be achieved by placing an additional ferrite rod "end-to-end" with the radio's existing internal ferrite rod, thus increasing the rod's "effective length" and "signal pickup". This is preferred over replacing the radio's existing ferrite rod and antenna coil since no changes are required to L1 which would affect the radio's alignment/tracking.

<u>Future Project Ideas</u>: Make the GE Superadio II or Superadio III into a GE "super-regen" Superadio? Maybe this will cure the Super II's bandwidth problems! Any takers (use the SII's bass control for the regen control? Does the SII or SIII already have an FET front end where regeneration could be easily added?)?

Conclusion:

This is a low-budget project, so there are few risks involved. Substantial improvements in AM DX performance can be a result of the modifications described herein. The author has achieved AM performance with AM/FM "walkman-type" radio to the extent that they now outperform GE II Superadios and more expensive communication-type receivers.

Parts List: (Existing radio components are arbitrarily labelled as shown on diagrams 1, 2, 3a, 3b, and 4).

C9-C12=.01µF ceramic disk capacitors RS 272-131

R1=1M Ω to 2.2 M Ω 1/4 w. resistor RS 271-312 Res. Kit

 $R2=100\Omega$ 1/4 w. resistor RS 271-312 Res. Kit

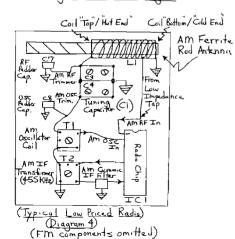
R3=1K Ω to 2.2 k Ω 1/4 w. resistor RS 271-312 Res. Kit

R4a=10KΩ variable resistor (Diagram 3A) RS 271-1715

R4b=500Ω variable resistor (Diagram 3b) RS 900-7894

L2=100µH choke RS 273-102 or RS 900-4947

Original Radio Parts Layout



L3a=2.5 turns #22-#26 enamelled wir e wound in same direction as L1 wound near the top of L1 (hot end of L1)

L3b=2.5 turns #22-@26 enamelled wire wound same direction as L1 wound near the bottom of L1 (cold end of L1)

L4=1.3 turns #22-@26 enamelled wire wound same direction as L1 wound near the bottom of L1 (cold end of L1)

Q1=MPF102 N-channel FET RS -276-2062 or similar

Alignment tools = RS64-2230, or RS 4-2220, or RS 910-3783

Misc.= Hookup wire, solder, soldering iron, knob for regen control. longer ferrite rods, etc.

Radio= nearly any low-priced portable analog tuned AM/FM radio

*Note: Many of these parts may already be in your junkbox. For instance, the ≈ 100µ RF choke (L2) can be made by taking an old small AM antenna iron ferrite bar and breaking off 1/3 of the bar, while keeping 1/3 of the litz windings on it.

Musings

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of the Members

Times are local per Muse; submit double-spaced only.

Thoughts from NRC members ... the opinions expressed in this column are those of the individual writerand do not necessarily reflect those of the editors, publishers, or the National Radio Club, Inc.

Perry Crabill, W3HOX - 225 Milam Drive, Winchester, VA 22602 <<pre>crabill@visuallink.com>> My last musing (DXN #26) referred to getting Sparks on your radio when the new station in Sparks, NV, goes on the air on 1400 kHz. Actually, Sparks already has KLPY on 1270 kHz with 5000/5000 U4; not only that, they have been granted 13000/5000 U2. Your chances of getting Sparks from your antenna will increase further when another new station gets going on 880 kHz from two sites there with 5000/400 U4. I note in AM Switch that WNVR-1030 has applied for 5000/5 (CH 3200) U5. I wonder what their coverage area is at the 5-watt level, and how much they charge for commercials when running the reduced power. Certain other LSS power changes intrigue me; for instance, back in November WTVN-610 was granted 5000/50000 U4. Maybe I can copy them through local WNTW-610 when they make the change. It's the first time I've noted a higher power at night, but I see that WGLB-1560 was granted 185/250 U4, also in November. That calculates to a 1.3 dB increase in output; do you suppose anyone will notice the difference? Back in the sixties, living in the DC area, my best receiver was a Heathkit Mohawk RX-1 (Ham-Band only). I built a BCB down-converter with a 6SA7 mixer to allow me to take advantage of the RX-1's selectivity and SSB capability. This was back in the sixties, and allowed me to do a pretty good job on the 5-kHz Latin America splits that abounded at that time. I also logged ZFB-1235, Bermuda, 4VEC-1044, Port au Prince, Belize on 834 kHz, and Paramaribo, Surinam on 725 kHz. My best DX with this setup was Radio Senegal on 765 kHz. However, for some reason I didn't have much luck with 9-kHz Europeans, except for a few heterodynes.

Ben Dangerfield, 202 Governor's Dr., Wallingford, Pa. 19086 << Ben-Dangerfield@msn.com>> Hi Dave! Here I go again, making excuses for my lack of contributions to Musings this season. Well, one is that I recently signed on to the AM DX reflector service to which I frequently add my two cents, which I guess one could say is a sort of informal musing. And of course, there have been my overseas jaunts. So far this year have been in Paris and London [with wife and 19-year-old granddaughter] and my wife and I leave this weekend for a trip that will take us to Finland, Russia, Belarus, Lithuania, Latvia and Estonia until mid-June. As usual my Sony-100 and KIWA pocket loop will go along, so perhaps a little DX, time permitting. The DX season just ending had some high points, such as November reception of Nagpur, India-1566 and April reception of Chania, Crete-1512. I got the Chania verie card back in 13 days, much to my amazement, for country #128, but the return from India hasn't as yet materialized, and I fear I shouldn't have sent my report to the regional station. May have to follow up or try again. During the 1999/2000 season reception of both TAs and LAs was just so-so, undoubtedly due to the increasing sun spot activity and there were few productive openings. March was the best TA month of the year. My most interesting LAs were Suriname-670 and Brazil-760. I guess you are all aware I don't do much domestic DXing which doesn't mean I'm not interested in domestic stations. Please note that the Philly airport TIS on 1630 has been off for quite a while, as has the Penn's Landing TIS on 830. And WWIZ-640 seems to have upped power or changed pattern since going Disney, as it is much stronger here and splatters more. Other news here is that I have traced a prime buzz source to defective light sensors at my next door neighbor's, thanks to a Philadelphia Electric troubleshooter. My neighbor has ordered new equipment. NRCer John Harding, who used to work for PECO, was also helpful. One more thing. My wife and I have reserved a room for the Lima Convention, so hope to see many of you there.

Facts About NRC's DX Audio Service

The DX Audio Service provides the ONLY monthly broadcast news cassette service to the DX community. Available to anyone, anywhere, it is designed to inform the radio listener in a pleasing and informative manner. Many of the announcers on the service are professional broadcasters giving their free time to give the listener the finest service available.

DXAS was started to provide broadcast information, both AM and FM, to the visually-handicapped DX listener. It has evolved into a service which provides useful material to all types of listeners. Many subscribers listen to the tape to and from their place of work while driving. Features include not only news about DX, but also airchecks from radio markets, dialscans, frequency scans, and other items.

A one-year subscription is only \$25. Sample 45-minute copy: \$2.00; back issues of DXAS: \$3. Cassettes are mailed by First Class mail, on or about the 20th of the month. For information, subscriptions, renewals, back and sample copies: write to DX Audio Service - P. O. Box 164 - Mannsville, NY 13661-0164