

VOLUME 40

#### MARCH 14, 1973

NUMBER 19

"The articles in DX NEWS are the most informative in any radio club." (Paul Scottini, California)

#### IN THIS ISSUE...

The Nature and DX of BCB Harmonics - Ron Schatz Czech Your Countries - Steve Bohac How Directional Patterns Are Produced - Wes Boyd New Zealand Tries the Space Magnet - NZRDXA Technical Data on Radio Bristol - BBC via Bill Bailey Verie Signers - Ernie Cooper A Visit to the National Radio Zepplin - Capt. Glotz



#### NEW NRC MEMBERS THIS WEEK...

- \*Nelson Dionne, 22 Sumner Rd., Salem, Mass. 01920
- \*Philip Horman, 37 Sterling Ave., White Plains, N.Y. 10606
- \*Roland Schemers, 5945 Brynthrop, Utica, Mi. 48087
- \*W.A. (Bill) Boren, 3512 Antilles Dr., Mesquite, Tx. 75149

Welcome to the NRC; contribute often!

#### NOTES FROM HQ...



\*\*\*Does anyone have any old World Radio Handbooks? Don Jensen, NRC member and top DX writer, is trying to complete his collection of WRTVH's; he needs the 1954 issue plus all the issues prior to the 1950-1951 edition. He will pay reasonable prices plus postage. \*\*\*The first snag has hit the new Domestic Log project; one of our volunteer workers (in Southern California) in charge of preparation of part of the alphabetical/by frequency tabulation has dropped out of sight without finishing his part of the job or giving us any explanation... This will slow things down by at least a week since someone around HQ is going to have to do it in the midst of getting DX NEWS out, etc. This isn't the first incident of this sort that the Club has had and it probably won't be the last; all we can do is take it philosophically and be thankful for the remarkable reliability of our Editors and Publication Committee that makes DX NEWS possible... \*\*\*If you've recently made a large reprint order, have patience it's on the way. Mark Katz reports that he's completely flooded with requests for reprints - more than 2800 pages worth in the last three weeks - and has had to replenish his stocks of many of the more popular articles. He's also in the process of creating a new reprint list covering all of the articles which have appeared here in DX NEWS since the last list appeared; we'll run the new list here when it's completed. A copy of the old list is available from HQ for a SASE of course... \*\*\*CREDITS for publication of the last few issues go to: Ray Moore, Hal Robie, Bill Bailey, Dan Kahn, Chuck & Jackie Rossier, Cary Pall. Big George Kelley, Diane Nelson and GPN... \*\*\*No sign of the MF shipment yet; hopefully the currency devaluation hasn't complicated things... They'll go out the same day we get them; a couple more are available if anyone else wants one. \*GPN & BGK

IF YOU DON'T GET A COPY OF THE NEW NRC DOMESTIC LOG, YOU MIGHT AS WELL BE USING THIS...

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The new Log won't be perfect but it'll be better than anything else, Washington DC included... Updated to March, 1973, the new NRC Domestic Log gives locations, calls, day and night powers, class of operation, addresses, PSA powers, and Construction Permit info for every station in the U.S. and Canada including the CBC LPRT transmitters. Available to NRC members for only \$5.25; add 75¢ for First Class mail delivery. (The above page is from the 1929 Radio Station Call Book of the Boston Globe, used until recently by Ephram Itkin of Crudup, Mass.)

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Mon. March 26	K S Y L	970	Alexandria, Louisiana	1,000 U-1	1:10-1:25	NRC
26	KRNY	<b>1</b> 460	Kearney, Nebraska	5,000 D-1	2:00-3:00	N R C
26	WBRJ	910	Marietta, Ohio	5,000 D-3	2:30-3:00	IRCA
26	WLSI	900	Pikeville, Kentucky	5,000 D-1	4:00-4:30	IRCA
26	WFLN	9000	Philadelphia, Penna.	1,000 D-1	5:15-5:30	IRCA
Mon. April 2	WJAB	1440	Westbr∞k, Maine	5,000 D-1	12:01-1:00	NRC
2	WRAN	1510	Dover, New Jersey 10	kw/500 υ <del>-</del> 4	2:00-	NNRC
Mon. April 9	WKIK	1370	Leonardtown, Maryland	1,000 D-1	2:00-3:30	NRC
. 9	WXCL	<b>1</b> 350	Peoria, Illinois	1,000 U-4	2:00-	NNRC
Mon. $4/29-6/15$	WCER	1390	Charlotte, Michigan	5,000 <b>D-</b> 3	All Morn	IRCA
A Mon. soon	TIJC	675	San Jose, Costa Rica	15,000 U-1	2:00-5:00	NRC

THESE ARE THE VERIE SIGNERS FOR THE 3/26/73 TESTS:

KSYL Thomas Cates

Thomas Russell, C.E. KRNY WISI Jerry Shouse, C.E. WBRJ Thomas O. Hamilton, C.E. DETAILS NEXT WEEK! Thomas Moyer, C.E. WFLN A lot of TOMs there!

ERNEST R. COOPER - 438 East 21 St. - Carrier Route 56 - Brooklyn, N.Y. 11226 V/c in from WMMM-1090-TEST, and a v/q from R. Nordsee-1367, for reception of last October, on report I sent to their Switzerland address. The v/q shows the ship on which the big antenna is mounted. Looks as though if they encountered high seas and tilted or listed a little, that they'd topple over! (Imagine their SIDEband then!) Also nice v/f from WERC-960-TEST. Again. all DX was confined to MM, 2/26, a sad morning here, as all three locals who were begged for stand-bys gave us the finger. Maybe there was a mix-up with WINS as they WERE silent MM 2/19, all AM, too. They stayed on today, and WWDJ-970 rode roughshod over the KSYL r/c dedicated to NRC, but in reading over my letter to them, I asked for a stand-by for MARCH 26, so let's wait till then to scream, hi. WWRL blasted away, & I have a funny feeling they're going to be off next MM 3/5. WKBW-1520 must ve been on AXE as another RS-rr was almost as loud, either unns KOMA or WITO. IT-950 around 1:45, unID. KFHK with S-7 signal @ 2am, w/the jumps & I tried with everything I had to bring in KCHY, but I just couldn't do it. so I guess it'll be never here, as the West was great today on the high end, w/kkHI in well on 1550 A 2:58 s/off. But, WWRL or no, I got a few bits from WCPK-1600-TEST anyhow, happily, and report off to him. I also took a log on WMEE-1380 on/off during the AM on its AN-rr thing, on top this morn. KFAB-1110 was too strong today to get anything on that mysterious Venezuelan who s/on @ 3:30 or so. WCCO-830 was off today as was WAPA-680 (second MM in a row) Who was the tester on 1580 around 2:59 & on playing a male-vocal album, MoR? Another old AN that was not heard this morn was HJKC-850 - maybe austerity is coming to Bogota, hi. WDEL -1150 noted above all @ 3:50 ID. No chance for WKEN (unn) nor KLEB here, darn. I vow never to buy anything in Busch's Credit Jewelers! CUN7.

#### "AN" SITUATION

580 WKTY Off MMs, 3-6am EST. 1230 KYSM Now back on NSP 680 WAPA Off last two MMs, permanent? 1380 WMEE NSP - rr

# MUSINGS OF THE SHOWING WELL AND THE SHOWING WELL AN

HANK HOLBROOK - 7211 Chestnut Street - Chevy Chase, Maryland - 20015 Since my Musing in the 1/31 bulletin the following stations have been logged and reported (all from thew Chase) - 12/28- yyoz-1200 5;38-5:55am, WCIW-1140 0. 7:24-7:28am. 12/29- HIBG-1160 D.R. 5:16-6:05pm. 12/30- WKDE-1000 Va. 4:48-5pm. Seven so far in 1973 - 1/2. WICY-910 Tenn. 6:15-6:18am. 1/6-YVNN-940 Venezuela 5-5:23am. 1/7- HILB-860 D.R. 4:12-4:36am. 1/10- CXTS-900 Que. 1/25- WSST-800 Fla. 5:15-6pm s/off. 1/27- 1955-920 Fla. 5:41-6. And, on the 29th, MPRS-1090 3:05-4:05am. Above, the underline stations have GSIed. Oth er stations CSLed since last report - v/1 from CFRS-1560 250w, CFTR-680 KWWT-540 WWWB-1440 WKCH-1420 WKYB-1000 WIAQ-1410 WCEF-1050 WIDG-940 WVAR-600, R. St. Pierre -1375, WKCY-1300, plus cards from WEVD-1330 & WOTT-1410. I'd like to make a comment on the NRC Report Forms. I think it is very fine but I'd make two changes. (1) Put it on legal size paper 82x13 or 14 allowing more room for program details. I know you can complete same on the back but when you're using carbon it's a nuisance and it distracts from the flow of the content. And (2) "I wish to request a brief letter (insert "or card," here) confirming the fact that I have received your station's signals. A lot of stations send cards (and I frankly prefer a good looking v/q over a v/f any day!). Total all band veries at 8,111 stations of which 2,341 are on BCB w/100 BCB countries.

DICK THUAX - 3003 Gleeson Lane - Jeffersontown, Kentucky - 40299 Once again it's time for the meager catches from the suburbs of Louisville. Only DK of unusual quality will be noted as I am still in the "catchup" phase of starting the log since moving here last Spring. 12/28- WWOL-1120 N.Y. s/off @ 4:45pm w/pest KMOX nulled. I thought I heard WUST also but no definite ID. 12/31- KFUO-850 Mo. s/off @ 6:30pm amidst mucho WHAS slop. 1/3- KAMD-910 Ark. w/ID & Murtual NX @ 19:30pm. 1/8- KALB-580 Ia. w/ERC-type mx @ 6:24pm, still heard after pattern change @ 6:30 u/WCHS pest. 2/5- WSUI-910 Ious @ 9:31pm w/ID & lecture. 2/10- While local NRCer Cary Atkins visiting I noted WYMB-1410 S.C. ON FOR SNOW EMERGENCY, @ 7:10pm killing WING/WLBJ combo. I'm surprised no one else also had heard the pirate on 1610, WCRK. As I type this 2/20 they are s/off w/SSB @ 8:05pm. They were heard weakly in W. Va. many eves; here they are audible most nights and much stronger. Format is c/w, very little talk, but frequent IDs. From loop bearing and time checks last Summer when it was an hour behind Louisville, I would guess location to be someplace in central Indiana. Presently on same time as I am, fairly strong and rocl-solid weekends during the day although audio quality leaves much to be desired of late. They should be heard by many in the midwest. So much for now, more as quality of catches improve, hopefully.

JOSEPH W. FLOWS - Box 148 - Chaplin, Saskatchewan

It must be nigh onto five years since my name appeared in Musings. The shame of it all. Well, I'm back in '73. I am still using my Trio 9R59D purchased some three years ago, and have purchased another recorder this year, making three now. Verie return over the last couple of years has shown a 80.4% return but 77.3%; this year showing a dismal 75% return. Consudering this bird sends nothing but taped reports this is not good. DX of 2/19 showed tentative WNWI-TEST, with some march mx heard @ 2:02 & again very weakly @ 2:17. Too much TIC & KWJJ. A surprise in WEIS @ 3:18 on f/c v/Tijuana Brass records, and frequent IDs, up to 3:30. R. Paradise showing @ 4am s/on, what a powerhouse this is going to be to contend with, yuk. ID by YL on R. Mara caibo 4:20am, a frequent visitor here. WRIZ, Fla. noted IDing @ 4:21am as "Your Station for Inspiration". At this time of morning, I usually need a little inspiration, like another pot of coffee or java. WKIX Raleigh N.C. noted w/ID @ 4:35am also. KIMS Lincon Neb. on w/EI @ 5:04. KAOK f/c noted good to poor @ 5:15, lost to KVOP f/c @ 5:18. That's 73s to this first and very rusty report in quite some time. (Welcome back, Joe!)

DEADLINE IS EVERY THURSDAY IN BROOKLYN FOR MUSINGS. BE SURE TO DOUBLE SPACE. BE KIND ENOUGH NOT TO INCLUDE MUCH NON-DX STUFF AND OMIT VERIE SIGNERS FROM MUSINGS.

GEORGE B. SHERMAN - 104 Pinewood Circle - Rosemount, Minnesota - 55068 A while ago I sent a report to Musings that I had an Allied A-2515A for sale, but it never appeared in print. Are "ads" banned in Musings, or didn't you receive it, ERC? (Ads are not banned - I received it, but it came after Line #30 -ERC) Anyway I finally sold it through the local ham store. (They sell radios in butcher shops in Minnesota?? -ERC) Now I have a Hallicrafters SX-43 AM/SW/FM FX for sale w/speaker & manual. BFO & headphone jack don't work, so I'd let it go for \$35 plus shipping to whomever wants it. It can split 10k almost always but no good for IA & TA splits. Very sensitive, though. DX has been CK, 39 new stations to far in '73, bringing totals up to 1,502. MM 1/22 - KFEE-9AO Chi. was heard & Min s/off-ESB, poor u/KICA DC & KONG; also KENC-710 Tex. fair u/WHE OC & KHTR w/s/ofr 8 2:02. WABC & WWL were off. On 1/23 KFMB-750 Cal. poor way u/MJR 6 4:03am. 1/24 found unID 500 u/MHT s/ I listened and found it to be unn KROD as expected, but I heard ckear KCLS Ariz. ID u/KROD, u/ WMT @ 1:30, & WMT is practically a local here! So I tuned to 690 for the other Flagstaff station (KEOS) & sure enough, u/KHEY/XETRA w/rr @ 1:48 playing rx when the DJ announced "12 minutes until tomorrow" which is what I'll use for an ID, hi. At 8pm that eve, R. Quince-1220 in Barranquilla was 15 o/S-9 way at p. 1/26 brought KRMT-1310 w/lengthy Neb. NXcast o/QRM, good signal. 1/29 was great, starting w/WTTS-1370 Ind. w/possible s/on @ 5:30 u/WSPD. SSS featured KIUP-930 Col. way o/QRM w/SID & local spot, reported; then KARS-860 N.M. @ 7:10pm s/off five minutes early, S-9 plus 20, no QFM: And I thought I'd have to get them on MM f/c, hi. (KARS s/off 7pm -ERC, my typo -ERC) KKM-1000 N.M. @ 7:10 s/off 5 minutes early. 10pm I stumbled onto ZJB-886 R. Montserrat w/GSQ s/off, country #41. Then I got state #47 @ 1:39am on 1/30, WFFA-1370 N.H. s/off ID when WSPD's announcer was nice enough to pause half a second for breath, then SSB u/WSPD. Interesting to note this reception occurred during Auroral CX. KHOB-1390 N.M. way o/QRM w/rr @ 6:11 mm, KMAR-1570 Ia. s/off 6:30 way o/QRM, HIJP-R. Comercial-1020 (listed 1010) will rr & SS announcements, strong & way o/QRM, undoubtedly on day power @ Spm, their "FCC" must be even less effective than ours, hi. R. Clarin -860 must use their daytime was AN, isn't licensed night power only lkw or so? On 1055, HJFZ "La Voz del Centro" @9:28pm, YNAG-1475 "R. Cosiguina" good @9:57pm..

JEFF KOSNETT - 600 North McClung Court - Chicago, Illinois - 60611 Pretty fair DX here during the heatt of the Winter season. Unfortunately, though, I haven't been successful in logging any of the DX TESTs. Here goes: 1/18- WGST-920 Ca. w/"Gild" rr & plugs for hockey broadcasts @ 12:35am, folo @ 12:49 by WBRC-960 Ala. w/more past rr. Two newles for me, and the start of some good Southern DX. 1/29- WAPE-690 Fla. @ 12:30am. WFLI-1070 Tenn. w/a test @ 2:15. This was a fortunate catch because I was going for KTGO, in vain, & just stumbled on this one. 2/3- WGY-810 N.Y. @ 3:15 - nothing special about this, but how come this dominates 810 out here? I have tried frequently, without success, for KCMO. 2/6- A battle royal for 610 between WSGN & WDAF - both IDed @ 11:15pm or thereabouts - another good Southerner and my first from K.C. 2/7-KXCK-630 Mo. shortly before midnight, logged & veried, St. Louis #5. 2/8- CKFH-1430 Ont. very strong rr @ 12:35am. 2/12-SS rr heard on 600 or so just above CMW, who? Just after midnight. WNCO-1340 O. w/just an ID from a jumble @ 1:05. WENT-930 W.Va. logged & reported from 1:50-2. WSUN-620 Fla. very powerful w/WTMJ off w/MoR & Fla. frost info - logged for report @ 2-2:30. Later that evening, KSD finally through terrible WIND splotch @ 10:15pm. WIND takes up from 550 to 580, & was audible on the same as well as 560 side of KSD. CKCY-920 Ont. w/ID € 11:05pm, logged the following evening for report. WKCT-930 Ky. w/incredible signal, IDed @ 11:15pm. There is fery little bet een WCFL & WIS here at night, and the 900s, with no dominants, are worth a try every night. 2/14- WTAD-930 III. my third newie on 930 in many days, IDed @ 10:58 way u/WKCT, which doesn't come in like 1kw should! With WKY & WEOL, that's vie on 930 this month. 2/15- A search of the 920-930 area got these new pests: WECT & CKCY - I hope they go away soon, hi. 2/18- Up till 3am, absolutely nothing with worst CX of the season. 2/21- Another surprise - WKYX-570 Ky. w/absolutely unreal signal way o/WIND splatter & everything else from 1:50 until s/off @ 2. I'm trying for a verie but it might be tough. No SSB after s/off, if that means anything. 73 to all and keep the good work coming!

ROUND. TRY TO INCLUDE ALL YOUR DX BY DATE, TIME, AND FREQUENCY. GOOD READING!

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F - R. Musco
G - M. Beckett
H - W. Boyd
I - F. McCoy
J - J. Poterba
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We have another pagrful of v/s for you, and we'll have them in an upcoming TK NEWS. Be sure to use the little letters describing the type of verie received. Thank you.

1	B - A	· MELLY-MAN	0 - 0. 10001		ty	De of Actie Leceived. Harry Ao	u.
	560	UMIK	W. Salmon, CE	Ħ	1320	W C V R J. S. Hartigan, CE	A
	640	W HoL O	A. Saunders, VP	D	1330		H
			Maurice Rousseau	F	1340		I
	730	C Kra C	,	A	25.0		Ĵ
	740	W KqIS	u/u		1350		ВĴ
	770	KqU OhM	R. A. Iverson, TSu	E			Ď
	810	KBHB	R. Ricci, PD	D	1360		
	860	W DAN G	S. Karpiak, CE	D			X I
		WTEL	Theodora Kay	F			
	920	ANET	J. Siegel, CE	В			J
		WPTX	T. Fuchsen, CE	F	1370	WKIK G. E. Clark III	H
	930	KCCC	D. Runyon, CE	D	1380	WrMhInP V. A. Michael, GM, CE	E
	940	WIDG	L. James, GM	H		CFDA François Bastien, GM	В
	950	KFSA	J. W. Tucker, CE	H		WIZO L. Jackson, TM	I
	960	WERC	David Gleason, NRCer	E		WPLB W. Christensen, CE	J
	970	WCHN	W. R. Bates, CE	C		WTVR J. Kyle, CE	J
		WEBR	D. Lange, TD	D	1400	WSAM K. H. MacDonald Jr.	y
	980	WRC	C. Stifel, ProgAsst	D		KGVL L. Hackney, P, CM	H
	1000	KKIM		DHG		WMCS W. Chapman, P	J
		WQTY	R. A. Clark, VP	В	1410	CFMB A. Mielewczyk, E	E
		WVOV	M. Covele, VP	В	1420	W PhE H S. Daitch, CE WA4MZZ	C
		WKDE	L. Woodie, M	В	1420	W L N A N. Johnson, CE	3
		WIOO	Curt Allan	B	1430	WITI J. Perry, E	J
	1060	KFIL			1430	KMRC F. Bonner	I
	2000		G. Darling, RxD	D	1420		â
	1070	KAMA	J. R. McVeigh, CM	D		KTOE H. Engel, CE	ï
		WINA	T. L. Mann, CE	H	1440	KPUR G. Taylor, CE	
	1090	W Many M	R. G. Roy, CR	HE	4). =0	WNFL R. Henry, CE	D
	1100	WLBB	J. L. Kirk, M	E	1450	W D L B F. B. Nienow, CE	D
	1140	KLUC	K. S. Griffith	B	-1.0-	WWSC D. Covey, CE	J
	1150	WYFE	J. Robins, CE	D	1480	WBLU J. Wickes, E	J
		WGEA	R. Motley, A	E	1490	W D X L G. Moore	D
	1170	MATC	R. B. Hunter, P	10"	1520	WBNO J. A. Srell Jr, E	C
		WHLW	M. Lieberman, CE	B		W SqL T R. Kibitlewski, CE	F
		WBRW	D. Powers, CE	B		KXKW C. White, PD	I
	1230	WERI	C. Grande, VP, CM	H	1530	W RcP M Cheri Jones	H
	1240	WSEW	H. J. Williams, CE	H	1540	WPME R. Drummond, CE	J
		WWNS	S. Pendergraft, CE	H	1550	WYOU B. Polk, CE	J
		WIE KhR	E. Tucker, CE	E		KGMO D. Newton, OpM	E
	126.0	WPHB	D. Sharpless, GM,CE	- 38		W OgK J J. C. Fletcher	F
		WIBV	M. Mollring, CE	I	1560	WRSJ G. Tobin, M	D
		WDKN	Filson, CE	I	1570		J
		WEZE	B. Lyon, 🗷	3	23,00	W HmI I T. Diaz, CE	E
	1270	WHPH	C. Lama, GM	3		W T C L M. J. Hisson, NxD	E
		WLSM	G. E. Cockren, CE	B		W BhU X H. E. Wilkins, CE	E
	1260	WABX					E
	25.00	W Krs T	H. Konytko, CE	B	sudden.		
		WCPM	D. E. Baird, CE	E	1580		H D
	1290	WHGR	G. Bibb, CE, SM	DE		HEYY J. E. Woodard	7
	-	CJBK	P. Leuck, E	J	9.00	KIRT C. McKesson,	J
	1900		J. Guy, CE	н	1550	WQQW u/u, P	4
	7300	K WrC K	R. Cole, CE	D		W D B L J. Alley	EI
		WRKT	R. Schrader, CE	H		WWUN R. Martin, CE	4
		WAAC	G. F. Probst, CE	H	7554950	WETT J. Raab, Trf M	ď.
		WBLG	B. Corey, E	H	1600		J
	10000	WMTN	G. Guertin, P	J		KATT Z C. B. King, CE	Y.J
	1310	WRR	D. Hultsman, TD	1			

OMESTIC X IGEST



EDITOR:

r.j. edmunds box 846 wayne, n.j. 87478

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Greetings again, folk; we've a fairly good-sized column this time, so we'll move right into it.

### call applications

### DDX & HOTLINE!

1050 KLEN-TX req. KIXS 1340 KAOR-CA req. KORV 1430 WEEF-IL req. WVVX

(201) 335-6397

"If no answer, I'm not home..."

#### changes

++ 800 CJJC-BC Has finally made it here, ex-850 after many years, reported in IRCA's <u>DX Monitor</u>.

+ 1220 WLTO-FL FCC rescinded grant for call change to WCMQ due to objections from some company called "The CMQ Corp.". Will use WLTO until further notice.

+ 1490 WKRO-IL CP: 1000/250 U1

+ 1510 WKAO-FL CP is on. Never did see a formal notice of a grant on this, but FCC sez is on, so....

+ 1570 KQWC-IA ex-KJFJ

FEBRUARY: 2nd MM: WGOH-1370, WANY-1390 (each has only 1 ID. Is at start of check); 3rd TU: WFED-810, WVNA-1590, WART-1510, WABH-1150, WVOP-970, WHOL-1600, WEAS-990, WGUS-1380; 3rd FM: WAAC-1300; 3rd SA: KAMI-1580; 4th MM: WJDY-1470, KTHS-1480, WBFD-1310, WANV-970, WBCB-1490, WARM-590, KLEO-1480; 4th TH: WTCB-990.

CHANGES: 4th FM: KRWB-1410 0100-0130 is changed to 4th WM.

NO SHOWS / FEB. : WIOS- 1480 on 3rd TU.

1380 WAGE O/u 2/22 2020 W/ rr (RF)

#### politors & recolog

730	KSUD-AR	1830-45 w/ local nx, wx 2/12 (RL)
	KWRE-MO	1830-45 w/ c&w request pgm, vy gd 2/14 (RL) (TRS)
810	WCEC-NC	2/20 s/off 1845 no SSB, referred to WFMA-100.7 mc thru WGY
	JA-IMAW	
	KHOZ-AR	
	CKTS-PQ	
		no CHML. (TRS)
1040	KIXL-TX	1900-15 2/6 p/WHO (RL)
1050	WNES-KY	1830 s/off w/"My Olde Kentucky Home" 2/5 (RL)
	KMIS-MO	1830-44 w/ c&w 2/10 s/off w/SSB (RL)
	KMYO-AR	1845 s/off 2/10. Has frequent "Cameo" IDs. (RL)
	KSIS-MO	1830-46 w/local nx. wx 2/10. o/KMIS at times (RL)
	KFMJ-OK	1845-1900 2/11, poor, but good ID @ s/off (RL)
	KVPI-LA	1830-1900 2/25 we at all alone. No trace of the above sta-
		tions in rotten cx. (RL) *** Well, there was an aurora of
		pretty hefty size that weakRJE
1320	WVOJ-FL	0/n WJAS mill 2/22 2040 w/rr (RF)
1360		Doing well w/ Michigan State Sports Net, ment. Dowigiac.
		St. Ignace, etc. 1800 2/20 (JMP)
	MEBB-HD	Good w/ s/off 1746 2/21, SSB used. Will try to pull verie
		from this one. (JMP) (JMP)
3,370	WLCP-GA	Fair/poor w/ s/off here 1815 2/23 u/channel mess, poor copy

Noted atop a few seconds 2/22 2007 w/WIZS Bulletin Board 1450 WIZS-NC at Box 1011 (JMP)

Unreal level here w/ s/off 1745 2/25 - +20/s9 here. No SSB. 1520 WVOB-MD 'KB bearly gone thank to this one! (JMP) \*\* Would you believe thank to the aurora noted earlier this column??-RiE

0/u 2/20 1800 w/s/off, slogan is "The Mighty Willa" (RF) 1580 WILA-VA

WJVA-IN 0/u 2/20 1810 w/rr, s/off 1815 (RF) 0/u 2/20 1814 w/SSB, s/off 1815 (RF) WSKT-TN

Unmodulated carrier noted again 2/21 1758+ atop freq..

bearing is ENE/WSW. (RF)

Atop WAQI null 2/21 1750 ID, ads for local businesses then WNEU-WV

MoR (RF)

1600

1610

WORK-IN 1900-2000 hrd first time 2/17 w/ c&w selections from a few years back. Located in Underwood, Ind. Said would be back on air from 2200, did not listen. Hrd again 2/20 from 1900 to 2005 s/off. Said had been on air for past 4 hrs to make up for 2/18 when not on due to a big fight in the XR room. Was request pgm for friends and help, one a Miss Jones. Said would next be on 2/24, but did not show, however cx rotten. At s/off gave call, freq., power as 100 watts, no location. With a signal like that doubt it will be had again. (RL) \*\*\* Don't count on it, FCC is pretty slow to find pirates, regardless of size. -RjE

#### midnicht to sunrice

WJLS-WV Fighting it out w/ WHBQ 2/25 0118 w/ c&w (RF) Fair/poor w/WMCA w/mx, annets., 0230 2/20 (JMP) 570 WWNC-NC

O/Cuban-WMT-WCAO etc 0055-0103 2/16, gone by 0110 (WB) 600 CFCF-PQ

WPDQ-FL Atop 0054-0103+ 2/23 w/no Cuban or WCAO. WMT poor (WB)

620 WWNR-WV Atop 2/25 0134 w/ MoR, ID (RF)

Here w/day pattern again and 0200 2/26 (Foxy) 690 WAPE-FL

Hrd w/ c&w 0046 2/26, fair/poor (MG) SEO KONO-TX

Finally bits of this 2/26. Up for long ID 0302, then not 910 WPFB-OH sure what next. (WB)

Atop almost nightly here w/ c&w. IDs as for "Mismuh" (RF) KGLC-OK Hrd w/ Action Line at 0250; poor w/ semi-local WFDF off WSBA=PA

2/26 (MG)CBO -ON 2/19 0418 ID w/ what could have been a test. Instr. mx w/ long pauses between (dm) \*\* Not sked for R5 then -RjE

WGNU-IL 2/19, believe was testing w/ "Tokens" or "Happenings" album and ad for what phone co. says is Belleville Restaurant. hrd 0356. Test in 0340-0400+, gone by 0410. (dm) \*\* Interesting. Ads in ETs are agin' the FCC rules. -RjE

WMEL-FL AN w/rr 2/19 0345 ID for call change here. (dm)

WKVA-PA Fair/xlnt but fady w/ s/on 0558 2/24. Annets., 0558, SSB 0559, into PA state mx 0600. (JMP)

ET-mx-TT-OC off and on 0100+ most of AM, ruining freq. (dm) 930 WLLL-VA \*\* This either 2/19 or 2/26, Dan forgot to note which-RJE

KIOA-IA W/SID & rr 0302 2/26, fair (MG)

WKAZ-WV Fair w/rr 0129 2/26. DJ mostly said "Capital City" & no calls, but finally got ID. (MG) Seemingly in RS most of AM 2/19, sure hope not...(WB) \*\*\* Looks like is NSP, drat -RjE

WELI-CT 2/25 seemed to s/on 0530. Had SSer, rr, MoR there. MoR/EL mx had HI spots by male anner. KOOL??. If WELI on b4 7530, was very poor. (WB)

CKWS-ON Atop WFIR null 2/21 0034 w/ ad for local theatre (RF) (RF pls note call changed months ago-RjE) u/unID TT 2/25 0211 w/ ID. then rr. (RF)

Noted OC-TT 0200-0330+ MM 2/26. WWDJ & unID MoR u/OC (WB) 970 WWSW-PA Hrd w/rr & WWSW off for a change w/ID 0423 2/26 (dm) WVDJ-NJ

KSYL-LA Tentative here w/ lkHz TT most of time 0110-25. No IDs hrd. but several TT breaks 2/26 w/ severe WWSW-WWDJ QRM (JMP)

970 WFLA-FL ID hrd 0305 2/26, fair (MG)

KFWB-CA S/off 0330 2/19!!. Anno'd s/on as 0800. Is this a regular SP ?? (PKH)

KSVC-UT Absolutely beautiful test 0320-0400 when KMBZ back on testing. Betw. 0348 and 0356 TCs and IDs every minute, freq. clear except for Canadians, (PKH) U/WONE at proper time for r/c, but wrong MM. 2/19 0340(dm) \*\*\*\* This check is irregular. Is run whenever KFWB decides to go off, as monitor can't hear KSVC w/KFWB on. Is Usually either 1st or 2nd MM, per my verie last season or b4.-RjE

CKRM-SA Hrd well enuf for tape 0300 2/19 w/KFWB looped, CKNW unusu-

ally weak and KMBZ off. (PKH)

unID= 2/19 0500-0530 then off. Big Band instr. mx, long pauses between songs makes me think record not tracked; 0530 last cut faded down, then 5 sec. dead air & off, no ID. Way o/ WNOX here. (dm)

CKBW-NS Noted 0500 s/on 2/26 w/WCFL apparently trying to s/on, but having audio breakup. (Foxy)

Seems RS MAs now. Noted w/ WIBC off 2/19 still u/KNX (WB) \*\*++1070 WINA-VA \*\*\* Noted here 2/5, 2/12, 2/19 on RS -RjE

WNWI-IN TEST copied vy well 0215-230 2/19. KRLD OC to ard 0210. UNID carrier to 0215. WTIC no problem here, hi. (PKH)

On w. ET 2/19 w/ c&w mx, ID 0130, unn. here (dm) WQIK-FL This is the tester here 2/19 0255ish w/ c&w that kept cutting in /out. Gave one quick ID here when they evidently patched in a FM-type AN show for about 20 seconds. (Foxy)

WKTE-NC On w/ ET w/ c&w 0135-0220+ 2/19 (WB) KWBY-TX Testing 0330-0355 t/out 2/12, looking unsuccessfully for WEEO test. Surprisingly weak for 10 kw, must have quite a pattern. CKWX battling them. (PKH)

Hrd TEST 0427 2/26 vy poor u/CKOC (MG) WDEL-DE Noted on DX TEST 0345 2/26, xlnt here at only 50 miles.hi

WDCJ-FL Fair/poor 2/25 0700 s/on w/WGAR QRM. 1st SM s/on there, I believe (JMP) \*\*\* ??? -RiE

Noted off 0030-0300 2/26. Mexico, CHSC and unID rr there(WB) WGAR-OH Is // CJIC-1050 per annot on CJIC. (RF) \*\* A favor please/? \*\*\* 1240 CJWA-ON Stuff like this should be marked for "Changes" section-RjE

OC ET 0020-0030+ killing freq. o/WIXY/WWDC 2/26 (WB) WFBM-IN KFJZ-TX Fair/good w/ID 0230 2/26, didn't think WXYZ went off 'til 0300, so pleasantly surprised. (MG)

WCGC-NC Hrd w/ ID out of Ae nx logo 0005 2/20 way way u/WXYZ w/latter still +20/9 nulled. Looking for WDVL test which didn't show per CE due to trouble at another stn. he works at (RjE)

WLIK-TN Weak w/ s/off 0 00 u/WXYZ but enuf for tape 2/20 (rJe) 0035-0048 w/ c&w. Call in jx sounds like WKEY but no such 1280 unID animal. Think WIBY is rr, Whoozit ?? 2/24 (WB)

Fair/good w/insurance ad 0323 2/26 (MG) WKST-PA Poor ID, vy low audio on ET w/ vy strong carrier 0230 2/19 VLBK-TX W/ "The WIZE Giant Consumer Report" (call pronounced) 0118 WIZE-OH

2/19 per tape replay. Unn, but not heard since '64 (RjE) 2/26 momentarily surfaced o/usual din 0625 ID then into nx WAIR-NC

I think, WHAT not audible. (TRS)

#360 WDRC-CT Mostly o/WKAT 2/26 after 0300 (WB)

Copied s/on vy wk 0600 2/12, anned 1000 watts, but at this 1370 WFDR-GA hour musta been 500 watt PSA. (PKH)

TEST not hrd 2/12, freq. a mess but 5kw ND shoulda made it. KOTA-SD (PKH) \*\*\* Hrd in the Northwest per IRCA -RjE

WAOK-GA W/Black formatted Brother Esmond show o/uWMEE rr. Possible WAMS f/c u/it as hrd TT, but must check w/ DS to see if they really run it. 0400 2/26 (JMP) \*\* WAMS "r/c" not reptd. this season to my knowledge -RjE

WLCY-FL 0058-0101 2/20, first time hrd in RS in a long time. (WB) WNUS-IL 0/u 2/22 0130 w/prune comm'l, nx0301, wx0302, then MoR (RF)

Deadline: Fridays of each week; DX "Hot-Line": 201-838-5721 Condx again back to normal -- atrocious! But yet, some DXers still manage, à la the following:

unID. Signal from SE on 2/26 at 0007; music, with fast inand-out fade. Weak, auroral evening. (Dangerfield, Pa.) @ Hrd 2/24 0225+ w/patchy mod, hard to copy. Had apparent religious mx in EE. At 0231, EE ancr said "10,000 watt xmtr" and "leaving the air". Then religious message. Either s/off or f/out 0233. Loop broken, so couldn't get bearing. (Frcho, Ohio) (Radio Dominica, ex-695. Ed.) CUBA. A new Radio Rebelde, DF Baracoa is here. Hrd from \*\*620 Keys daytime. (Schatz, Fla.) GUATEMALA. TGW, La Voz de Guatemala, Guatemal City atop CMQ null 2/22 0745 w/ ID, then SS versions of pop EE mx. (Frcho) 640 PANAMA. HOS22, Panama. This one atop HJJX w/commentaries 650 in SS by YL ancr.; first thought this was HJJX and HJJX was KORL, but TODELAR ID in background and mentions of "Republica de Panamá" convinced me otherwise, hi. This 2/26 0930-0955. "Radio Mia". (Poterba, Pa.) (Good catch, Jim! Ed.) ST. LUCIA. Radio Soleil is here in FF 0930-1330. (DSWCI) EL SALVADOR. YSS, R. Nacional San Salvador in the clear 2/24 0254 w/ID, then mx. (Frcho, Ohio) unID. TA at 2350 on 2/20. Signed on 0000 with an anthem. \*\*656 but unreadable. Have been watching for Spanish Sahara here but RAI is possible, among others. (Dangerfield, Pa.) (Are these times EST, Ben? If so, possibly, as you suggested, RAI. Do you have tape of anthem? Ed.) GUATEMALA. TGRT, La Fabulosa, Guatemala, 2/22 0322 right on frequency w/ID, sports com try 0323, all over wMAQ; nevertheless, I have hrd it more often and with perfect reception on 88.8 mHz. (Hauser, Texas) NICARAGUA. Union Radio YND Managua in the clear 2/24 0218 675 w/SS mx, ID 0221. (Frcho, Ohio) COSTA RICA. TIJC, San Jose, "Sonora" ID after uptempo SS mx, no sign of "Radio" in ID 0522 very strong 2/25. (Myers) 675 MEXICO. XEHL Culiacan, Sinaloa o/u WOR/etc. ending nx 0520 2/25 and ID "Radiodifusora X-E-B-L". (Myers, Ohio)(Nice!!)
HONDURAS. HRDN, R. Caribe IDs after and during every selection and promo for station after every song; can't make out what says, "...recuerdalo, Radio Caribe..." them a freq (7--) 0451 2/25. (Myers, Ohio) (Dan I don't find HRDN listed as call. '73 WRTH has HRTV1--clarification? Ed.) COSTA RICA. TILY R. Columbia probably as others report, 725 2/24 0415 fair in SS talk, then mostly out (Hauser, Texas) CUBA. CMAQ Pinar del Río now here, ex-730. (Schatz, Fla.) \*\*740 GUYANA. 8RG Georgetown noted with strong aurora 2/25 0030-0130 w/EE nx and commentaries. Country #42.(Poterba, Pa.) S. VIETNAM. VOA Hue SKED:2200-0200;0845-1600.(DSWCI) 760 COLOMBIA. HJCY R. Sutatenza Bogota very strong after s/on 2/26 ID 0916. (Myers, Ohio) CUBA. Stn previously rptd IDed as CMDI, Bayamo, Oriente(RFS) \*\*820 IRAN. Quazvin has Teheran 1st Pgm:0300-2030 (2x 1000 kw.1) **\***\*841

GUATEMALA. TGX R. Ciro's still audible most nights on 1700

CURA. R. Musical Nacional in Oriente prov. noted hr. (RFS)

2/22, 0409; 0411 pgm "Ciro's Buenas Noches".(Hauser, Texas)

SYRIA. Dar'a here w/Voice of Palestine 0430-0530, 1300-1400.

(DSWCI thru Kocsan via RJE)

850

\*\*920

\*\*928

(DSWCI)

0718. (Myers, Ohio) 1079 \*\*1097 Labat, 64100, Bayonne, France. (DSWCI) 1100 mostly under the HJ. (Myers, Ohio) LITHUANIAN SSR. Vilnius in like several years ago, peaking 1106 1106 OOO3 on 2/19, all alone. (Dangerfield, Pa.) GUATEMALA. TGVR La Voz de la Costa Sur, Retalhuleu 2/24 0437 1135 jingle ID. (Hauser, Texas) 1158 (Hauser, Texas) \*\*1162 1169 Best signal ever with WWVA on. (Dangerfield, Pa.) 1180 1187 VENEZUELA. YVRE R. Barinas, s/off noted 0400. (DSWCI)
COLO:BIA. HIFT R. Quince, Barranquilla w/WGAR on ID 0628 2/19;
no sign next week, when WGAR off; hmrm...(Myers,Ohio)
HIARTEN, PJD2 "The New 2" SKED: 0930-0300 in EE, 0900-0930 1190 1220 \*\*1295 Maarten." (DSWCI) Bilston, Midiothian, SCOTLAND. (DSWCI)

CMGL Matanzas; CMGX is now deleted. However, there is still a "R. Musical Nacional" here, location unk. (Schatz, FL) (This item taken via phone, if info not exactly right, pse clarify next call, Ron. Ed.) VENEZUELA. YVKG Caracas new slogan is "R. Punta". ID: "R. Punta, nueva emisora de Caracas." (DSWCI) ALGERIA. Also 548,533. The Voice of Freedom, anti-Portuguese gov't clandestine uses R. Algeria FF XRs Sundays 0015-0100 in PP...A Voz da Liberdade. (DSWCI) SPAIN. R. San Sebastian EAJ8 bosts "R. Ocean" in FF 0600-0630, 1200-1230, 1830-1900. ADDR: B.P. 38, Andorre-la-Vieille, Principaute d'Andorre.(DSWCI)
PORT GUINEA?? 2/21 0659 a carrier w/a lot of fading; seems

CUBA. Two different "Reloj Nacionals" here, one ID as

\*\*930

##950

\*\*980

\*\*1025

too far S for Portugal, but my DF w/SM2 is not highly precise! (Hauser, Texas)(Sorry to dampen your spirit, Glenm, but methinks still it musta been Portugal, with pulled DF as you suggested. We'll all watch this frequency carefully for Port Guinea, and hope someone comes up w/some audio. Ed.) 1070 COLON BIA. HJCG R. Santa Fe. Bogota noted o/u mess 2/19 ID

MOROCCO. AA rusic at 0130 on 2/21, I would say //818. Has anyone yet IDed the TA s/on at 0330 on this freq. which I think is a Yugoslavian? (Dangerfield, Pa.) (Nothing IDed, but Koper II, which relays Ljubljana I is due to s/on 0330. Ed.)

SPAIN. L.V. de Guipuzcoa EFE23, San Sebastian bosts "R. Atlantic 2000" in FF 0600-0800 and 1115-1145. QSL de 38 Rue

VENEZÚELA. YVOP Tovar hrd Occidente ID o/HJ 0736 2/19 vy weak

at 0420 on 2/17. Inst. mx, fem ancr. (Dangerfield, Pa.) SPAIN. unID; pop SS mx, ancments by man, very strong at

CUBA. CMAD R. Artemisa presumed 2/22 0337 w/vocal mx, DF Cuba

HONDURAS. R. Pariso (or similar) with rr, both EE and SS mx, w/several mentions of R. Pariso Honduras. Excellent strength 2/21 0205. (Breger, Texas)(Welcome back, Michael! Ed.) PORTUGAL. CSB-30 Porto heard clearly thru WWVA at 0450 2/17.

BRAZIL. Radio Globo, Rio de Janiero ZYD65: Amazing signal on auroral evening 2/25. Many IDs before and after 0030, completely dominating the freq even tho WHAM was besting in prime time, and WHAM was barely noticeable. (Dangerfield, Pa.) (Believe yours is first reprted sunset reception of this one.Ed)

INT'L WATERS. Radio Caroline SKED in EE:2300-1000, 1300-1700, 1900-2200; in Dutch: 1000-1300, 1700-1900, 2200-2300 (DSWCI)

in DD on weekdays. Sundays on with religion w/"Voice of Sint

CUBA. A new R. Reloj in Pinar del Rio hrd here. (Schatz, Fla.) 11358/349 INT'L WATERS. Radio Caroline Scotland. Claims anchorage 4 miles off Scotland. SKED: 0000-0100, 1400-1800+ Sundays only. Cuts to 1349 to avoid late afternoon QRM. Even rptd 1320 once. ADDR: Box 261. Scottish Free Radio Movement, 17 Esk Grove.

1385

\*\*1388

\*\*1400

\*\*1407

\*\*1465

1475

1502

1502

\*\*\* 1525

1525

1554

1562

MEXICO. XECO, Mexico, DF "Radio ECO" IDs plentiful with 1380 mentions of "Núcleo Radio Mil, Ciudad de México". Ranchero

mx 2/19 0603. (Breger, Texas) MARSHALL ISLANDS/CANTON ISLAND. 2/26 0918-0958 s/off. American EE DJ, no spots, TCs for GMT +13 or -11 (Listed GMT +12 in WRTH. Ed.) Format of relatively current light rr (Steely Dan, Stevie Wonder, Elvis, Carly Simon, Lobo, Elton John, etc.) one nearly complete ID 0930 w/call and "Voice of ... " naturally fading in the noise. 0958 began s/off while faded almost away, had light instrumental selection to 1001 when SSB and off. Would be fairly straightforward but one of the TCs I heard at 0934 was "time on Canton, 24 minutes before closing" RH Millar has WXLE-Eniwetok, Marshall Is., WRTH '73 has Canton here, and slogan fits WALE, while the DJ gives Canton ... it's beyond my humble attempts, but will try again next MM, tho. (Sheedy, Calif.) (Dan I think I'd believe the DJ knows where he is an call it Canton, but in

where he is, hi hi! Ed.)
INT'L WATERS. R. Caroline South (amnc'd 217 metres) Sun. 1200-1800. Free Radio Enterprises, 15, Springfield Pl., Roslin,

these times, you can't even be sure he really does know

Midlothian, SCOTLAND. (DSWCI)

CUBA. CMJI Florida now //1030,860 Cadena Agramonte. (Schatz) MALI. Bamako tent. here in FF ex-1416,1432,1434. (DSWCI) HAITI. 4VCR La Voix du Nord, Cap Haitienne noted 2/25, native mx (merengues), few anmts. (Schatz, Santo Domingo, DR) CONGO. Brazzaville, La Voix de la Revolution w/4 kw. 0430-2300. (DSWCI)

POLAND. War saw very strong woman ancr and cl mx around 0027 2/26. Hasn't been hrd often lately. (Dangerfield, Pa.) unID. 2/21 0707 talk, fair strength but lang unk, hard to DF; seems a bit late for Poland; ideas? (Hauser, Texas) (Perhaps

Senegal w/10 kw.? Ed.) unID Russian; woman in RR, strong signal at 0503 2/17. First time heard so late. Perhaps this hour tells us something about the location of at least one of the stations being reported

on this freq. (Dangerfield, Pa.) PRC. Urumchi again with usual M/W in RR 2310 2/24 w/very auroral condx, no high-band TA paths open, 1520/1530 domestic channels barely audible, and this one completely cominated

segment 1500-1600! (Taylor, NJ) Same as above, simultaneously logged via land-line DX technique. First time ever here. (Poterba, Pa.) UNITED KINGDOM. Radio Bristol on 2/18: tone at 0646; church

bells 0652; storytime or similar 0655; announcements on the hour, then pop mx. (Dangerfield, Pa.) FRANCE. ORTF Nice 2/24 0404 FF talk, 0453 poor in FF; no sign of 1538 and 1586 etc., a good example of GPN's point of misleading A-indices-just given on WWV as 29, and multi-day

geomag storm continuing. (Hauser, Texas) LITHUANIAN SSR/FRANCE. On 2/17, Nice was blasting in at 0425, but 0005 was below Vilnius. (Dangerfield, Pa.)(0505Z?Ed.)

SWITZERLAND. Beromunster: strong signal, in GG 0615 on 2/18 with ski news. Also good 2323 on 2/21 with Swiss music. Also in on 2/28 at 0300. (Dangerfield, Pa.)

W. GERMANY. Langenberg WDR 2/21 0633 mx. (Hauser, Texas) PORTUGAL? 2/21 0635 good carrier, some talk. (Hauser, Texas) (Most likely, Glenn. Unfortunately, it's this one that's dominant here, noted signing on these days at 0500. Ed.)

unID TA with Viennese waltzes, 2/17 at 0500. Many possibilities, of course. (Dangerfield, Pa.) (This matches Portugal

format immediately after 0500, Ben. Ed.

\*\*1595 MICARAGUA. YNKS R. San Crisobal, Chinandega now here. nom. 1600; 2/22 0220 w/SS talk and mx; 0255 10-sec spot; 0201 official proclamations ("Articulo Segundo ... "etc.) het of some 250 Hz.; 0344 proved to be //750; 0359 off; not IDed until 2/24 0358 ending relay from Junta Nacional; quick ID then NA and 0400 CC; 0402:45 carrier off. (Hauser, Texas) unID. Presumed Colombian w/BKB game in SS 0430 2/25, no 1595 IDs before final fade, rats. (Myers, Ohio) (Poss. Above? Ed.)

\*\*1999.85 DO'INICAN REPUBLIC. HIFA La Voz de las Fuerzas Armadas still doing nicely on 3199.7 kHz. harmonic, noted 2/24 0459 w/2-min slow TC, s/off w/taps, freqs, NA. (Hauser, Texas)

--- NOTES ON THAT PARAGUAYAN ...

"What with all of the  $\infty$ nflicting info on this one over the past 15 months, Merriman's tape w/IDs sounding like "R. Santa laría", my tape which I thought had an "Encarnación" on it, and which DFG thought had a "R. Caaguazu" in it, Trower's ID of it as R. Caaguazu, and now RFS' tape of "R. San José" plus some confusion from last year about R. Puerto Presidente Stroessner, I submit that pending some sort of official correspondence from either a Paraguayan government source or from the station itself, we must consider it unID. Why? Because the confusion leads to other possibilities. 1)a shared-time agreement. 2)a change or even two changes in station slogan during the 15-month period noted above or 3)a change in the actual station by order of the government. It is most assuredly Paraguay, but beyond that, we should tread lightly." --- Russ Edmunds. (RE: 645-ZP. Ed.)

This week's contributors:

Dr. Michael Breger, Austin, Texas; Ben Dangerfield, Wallingford, Pa. R.J. Edmunds, Parsippany, N.J. Richard Frcho, Cleveland, Ohio Glenn Hauser, Von Ormy, Texas Dan Myers, Toledo, Chio James M. Poterba, Yardley, Pa. Ronald F. Schatz, Miami, Florida Dan Sheedy, Encinitas, Calif. Page Taylor, Butler, N.J. Danish Shortwave Club International

(1) HQ150, 4" MRC loop (5) HQ180A, SN2, 100'LW E/W (12)HQ160, 560' LW NW/SE (8) HQ180A, 3' box loop (3) H0200, SM (6) R388/URR, LSCA (1) SPR4, Sanserino loop SX130, 4 NRC 100p

---AN EDITORIAL PLEA---

Please remember to include calls, slogans and locations in your reports, as cross-referencing here takes a considerable amount of valuable typing time, which is already limited due to personal commitments. And remember to include your name at the end of every item! Frequency-order is <u>not</u> necessary, but double-spacing between items is a <u>must!</u> And, only one side of the paper, please! No hard feelings-I'm not nit-picking, hi. In looking at the above, doesn't anyone DX from the Mountain Time Zone anymore, hi.? Daddy! Mcmmy! Is there really a Denver?

#### \* Wes Boyd, WHOT

THE N.R.C. NIGHT PATTERN BOOK CONTAINS SOME 1,450 DIFFERENT DIRECTIONAL PATTERNS. WE'RE SURE SOME QUESTIONS WILL ARISE AS TO HOW SUCH PATTERNS ARE CREATED. IT'S BEYOND THE SCOPE OF THIS ARTICLE TO MUCH MORE THAN SCRATCH THE SURFACE OF THIS SUBJECT. THIS IS DUE MOSTLY TO THE MATH INVOLVED WHICH HAS BEEN OMITTED HERE.

A BASIC RULE OF THUMB IS THE NUMBER OF TOWERS IN AN ARRAY EQUALS THE NUMBER OF NULLS IN THE FINAL PATTERN. THIS CAN BE TWISTED AROUND QUITE A BIT AS ME WILL SEE LATER, BUT FOR THE MOST PART IT'S ACCURATE ENOUGH TO BE VERY USEFUL.

IN OUR EXAMPLES WE WILL BE DEALING WITH IDEAL CONDITIONS. IN REALITY THIS IS ALMOST IMPOSSIBLE DUE TO BUILDINGS, POWER LINES, ETC. SOONED THAN ADD MORE COMPLEXITY TO AN ALREADY CONFUSING SUBJECT WE WILL DEAL WITH IDEAL CONDITIONS.

A SINGLE VERTICAL TOWER IN A FIXED LOCATION FED WITH A SPECIFIC POWER WILL RADIATE EQUALLY IN ALL DIRECTIONS. Now WE ASSUME A STRAIGHT LINE RUNNING NORTH AND SOUTH OF THIS TOWER. WITH THE ADDITION OF A SECOND TOWER WE CAN NOW CREATE SEVERAL BASIC DIRECTIONAL PATTERNS.

PHASING AND SPACING OF THIS SCCOND (IDENTICAL) TOWER CONTROLS THE ACTUAL PATTERN. NULL DEPTH CONTROL AND PATTERN SHAPING IS BY MAGNITUDE CHANGES BET—WEEN THE TOWERS.

Moving tower #2 to a location 180 degrees north of tower #1 we develop a figure eight pattern, if both towers have equal, power, and magnitude. The field from tower #1 to tower #2 is 180 degrees out of phase and cancels. Identical conditions exist going the other direction which allows nulls to form north and south of the towers. Figure #1 is such a pattern.

AN ADDITIONAL PHASE SHIFT OF 90 DEGREES ON TOWER #2 WILL CREATE A BASIC CARDIOID PATTERN. TO THE NORTH THE FIELD FROM TOWER #2 LEADS THE FIELD FROM TOWER #1 BY 180 DEGREES AND WILL CANCEL. MOVING SOUTH OF THE TOWERS WE FIND THE FIELDS ADD AND CREATE A LOBE. FIGURE #2 SHOWS A CARDIOID. THE FIELD TO THE SIDE OF THE TOWERS CREATES A FIELD SOME 41% STRONGER THAN NONDIRECTIONAL OPERATION WOULD.

MOST ARRAYS OF MORE THAN TWO TOWERS ARE ONLY COMBINATIONS OF THE SIMPLE PATTERNS JUST EXPLAINED. ADDITIONAL TOWERS IN A FIGURE 8 PATTERN WILL NARROW THE LOBES AND WIDEN THE NULLS. OTHER TOWERS COULD BE USED FOR A "DOG LEG" EFFECT BUT WE'LL EXPLAIN THIS LATER. FIGURE #3 SHOWS SUCH A FIGURE EIGHT.

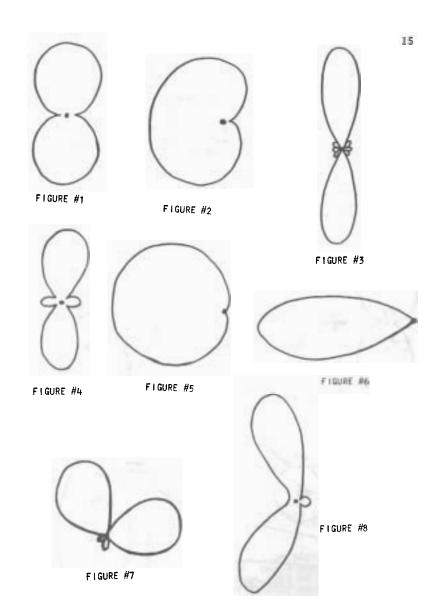
WE COULD USE FOUR TOWERS FOR A FIGURE 8 PATTERN. HERE TWO BASIC FIGURE 8 PATTERNS ARE FORMED BY EACH SET OF TWO TOWERS. THESE INTERACT MUTUALLY ON EACH OTHER FOR A PATTERN SIMILAR TO THAT IN FIGURE #4.

SUCH INTERACTION CAN BE USED WITH CARDIOID TO FORM PATTERNS WITH LITTLE POWER IN VERY WIDE HULLS. TWO CARDIOIDS INTERACTING WILL NARROW THE LOBE AND MAKE IT MORE POWERFUL. (FIGURE #5) STILL ANOTHER CARDIOID COULD BE ADDED TO ACHIEVE A PATTERN SIMILAR TO FIGURE #6.

ADDITIONAL TOWERS IN AN ARRAY ARE NOT ALWAYS USED TO DEEPEN/WIDEN NULLS OR TO CREATE POWERFUL LOBES. THEY CAN BE USED TO CREATE "CLOVERLEAF" OR "DOG LEG" PATTERNS FOR ADDITIONAL COVERAGE.

THE "DOG LEG" IS CREATED BY HAVING A TOWER OFFSET IN RESPECT TO THE OTHER TOWERS. THIS ALLOWS THE PATTERN TO BE TWISTED AS SHOWN IN FIGURE #7. YOU WILL NOTE A SHALL SIDE LOBE, AND SIMILAR SHALL LOBES IN OTHER MULTIPLE TOWER ARRAYS. THESE ARE A PRODUCT OF THE INTERACTION OF THE TWO PATTERNS.

"CLOVERLEAF" PATTERNS CAN LOOK LIKE A CLOVERLEAF OR MODIFIED TO LOOK LIKE FIGURE #8. MOST LIKELY THIS IS A COMBINATION OF BOTH CLOVERLEAF AND DOG LEG17'S REALLY QUITE HARD TO SAY AS THERE ARE SO MANY POSSIBLE COMBINATIONS TO ACHIEVE ANY SPECIFIC PATTERN.



END FIRE ARRAYS CONSIST OF THREE/FOUR OR MORE TOWERS AND THE INTERACTION OF SEVERAL DIFFERENT PATTERNS. FIGURES #9 AND #10 SHOW HOW SUCH PATTERNS ARE CREATED.

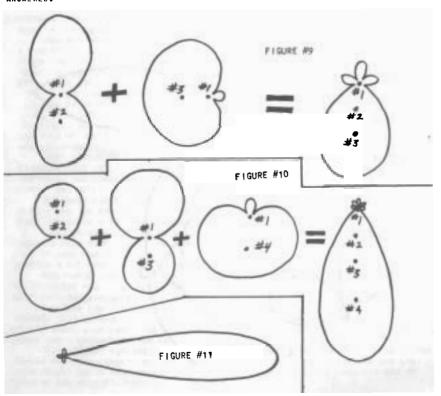
IN FIGURE #9 WE USE THREE TOWERS TO ACHEIVE THE FINAL PATTERN. TOWERS #1 AND #2 CREATE A FIGURE 8 WHILE TOWERS #1 AND #3 CREATE A CARDIOID PATTERN. THE INTERACTION OF THESE TWO PATTERNS WILL GIVE THE FINAL PATTERN SHOWN.

THE PATTERM OBTAINED IN FIGURE #10 USES THREE BASIC PATTERNS. TWO ARE BASIC FIGURE 8 PATTERNS WITH MAGNITUDE CHANGES. THIS SIMPLY MEANS ONE TOWER HAS MORE POWER THAN ANOTHER AND SO DEVELOPES GREATER FEILD IN THAT DIRECTION. SUCH MAGNITUDE CHANGES ARE USED ON TWO FIGURE EIGHT PATTERNS.

OUR FIRST FIGURE 8 IS BETWEEN TOWERS #1 AND #2 WITH THE MAGNITUDE BEING GREATER IN TOWER #2. ANOTHER FIGURE EIGHT IS DEVELOPED BETWEEN TOWERS #1 AND TOWER #3 WITH THE GREATER MAGNITUDE ON TOWER #1. FINALLY A CARDIOID DEVELOPS BETWEEN TOWERS #1 AND #4. THE INTERACTION OF THESE PATTERNS CREATES THE FINAL PATTERN SHOWN.

IF NECESSARY SUCH MULTIPLE PATTERNS CAN INTERACT UPON THEMSELVES, FIGURE #11 SHOWS A PATTERN DEVELOPED WITH THE COMBINATION OF TWO OF THE PATTERNS WE DEVELOPED IN FIGURE #9.

AS MENTIONED EARLIER IT S WELL BEYOND THE SCOPE OF THIS ARTICLE TO DO MUCH MORE THAN SCRATCH THE SURFACE. HOWEVER WE HOPE SOME QUESTIONS HAVE BEEN ANSWERED.



#### The Nature and DX of BCB Harmonics

Ronald F. Schatz

harmonic is a multiple of a fundamental frequency; e.g., 1800 kHz is the "3'rd harmonic" of 600 kHz - three times the fundamental. Harmonics are created when the generating aparatus, be it sound or electromagnetic, permits a signal to heterodyne against itself to produce a sum frequency which, in turn, may recombine with the fundamental frequency to form still a higher sum, etc. Long chains of harmonics may be formed in this manner, depending upon the amount of energy in the generating system:

 $\underline{600} + 600 = \underline{1200} + 600 = \underline{1800} + 600 = 2400 + 600 = \underline{5000} \dots$ 

Harmonics add to the esthetic quality of voice or music, and they find good use in crystal calibrators, but a harmonic radiated by a broadcasting station is a no-no. In such cases the cause may be an overdriven local oscillator in the transmitter, so that there is too much signal for the circuits to handle, or the front end (output circuits) may actually be tuned to a harmonic frequency, thanks to an incompetent station engineer, while other defects are possible in the circuitry.

In North America both the FCC and the DoT have strict regulations regarding the harmonic content of a broadcast signal, so that American and Canadian stations limit their harmonic radiations to levels that can be picked up only within a few kilometers of the transmitter site. In other lands regulations may be lax or nonexistant, such as in Latin America. There the strength of some harmonics may equal, if not surpass, that of the station's fundamental, and legal, operating frequency.

The second-harmonic "broadcast band" ranges from 1050 to 3210 kHz. Because of crowded conditions it is obvious that harmonic emissions are almost impossible to note below 1600 kHz, though the DX'er should assume that there are many present nonetheless. Only a decade ago it would have been possible to hear these low-band harmonics, but those days are gone.

So harmonic DX'ing is necessarily limited to those MW stations normally operating above  $800~\rm kHz$ , if we speak only of second harmonics at this point.

The place to hear harmonic emissions is on the "B" or "2" band of the average communications receiver, or the lowest SW band(s). As this is right smack in the middle of marine operations there is a lot of material present to offer both QRM and confusion to the uninitiated, so let us number some rules to follow:

1) The power output of harmonics is seldom more than a few tens of watts, so it takes a good receiver and a good ear to note rost of them. Location helps too, since most of the culprits are in latin America. Harmonic DX from Floride or Texas may be fairly easy, but quite discouraging from Canada. On the other hand, a coastal location will mean more interference from marine and navigational sources.

2) Become familiar with the "B" band: Note the wide-band "noise" of LORAN centered on 1900 kHz, which kills a lot of harmonic DX in its area. Ship-to-shore AM phone communications are most common, in Spanish and French as well as English. These transmissions are of a two-way nature, play no music, and generally cut the carrier (or give a "busy" signal) between messages.

18

- 3) Look out for the 120-meter tropical band (2300-2500 kHz). Not too many stations are active here, but they will still fool the unwary. Both Guatemala and México are active on 2390 kHz during the evening. Also note 4VSO-2450, outlet of Radio 4VEH.
- 4) Almost all harmonics will be found on frequencies divisible by 20 kHz this is a good rule to follow. Note the table:

800 = 1600	1100 = 2200	1400 = 2800
850 = 1700	1150 = 2500	1450 = 2900
900 = 1800	1200 = 2400	1500 = 3000
950 = 1900 (LORAN)	1250 = 2500 (WWV)	1550 = 3100
1000= 2000	1300 = 2600	1600 = 3200
1050= 2100	1350 = 2700	

5) Although a harmonic may originate from a MW transmitter, its signal is treated by the ionosphere indiscriminately according to its frequency. E.g., HIFA-1600 has a harmonic on 3200 kHz. This harmonic is propagated as a short-wave signal.

The fact above is extremely important: Any harmonic, regardless of its origin, is identified with the band it is found in; a harmonic of a medium-wave station is <u>not</u> a medium-wave signal by necessity.

With this in mind the author advocates the reporting of harmonic reception in the club bulletin of the effects are as follows:

- a) Such reception confirms the existence of an otherwise unheard station.
- b) The reception reveals information previously unknown on the programming, format, and schedule of the station.

But the author opposes the reporting of harmonics as an end in itself, save where the harmonic falls <u>within</u> the broadcast band. A description of the strength and quality of the harmonic signal itself or its propagation has no place in DX NEWS.

In other words, WILL THE INFO NOTED ON THE HARMONIC HELP ANOTHER DX'ER LOG THE STATION ON ITS FUNDAMENTAL FREQUENCY??

The author respectfully dedicates this article to Glenn Hauser, who blissfully started the whole thing.

-30-

(Note from HQ: these are essentially the same criteria long in use in DX NEWS and recently restated by the DDXD and IDXD Editors.)



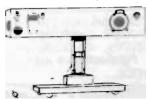
The limits of daytime skywave DX in Europe as measured by Bengt Ericson in Sweden this winter. The only reception beyond 1,100 miles was San Sebastian-1025 on December 28th. The maximum daytime skywave range in Europe is very close to the observed maximum noted in North America this year.

#### THE WORCESTER SPACE MAGNET

- a review from George Masson

For those wondering what a Space Magnet is - briefly, it is a 12 long 0.6 diameter ferrite rod mounted inside an aluminium 'Foraday' shield. The ferrite has about 200 turns of litz wire tuned by a miniature tuning condenser fitted with a vernier dial. It has a 2-turn inductance winding which is

connected to the receiver via the SM2's own built-in transistorised pre-amp. A pint sized tunable loop antenna - but with a difference. It responds only to the magnetic field, and not at all to the electrical field. However while the gain of the SM2 is about equal to that from a 35" loop (due to its preamp), its actual sensitivity is less than half that of a 35" loop, so that its application would only be warranted in a VERY noisy location. Weak signals which are audible on the 35" loop are usually lost on the Space Magnet under its own 'white noise'. This 'White noise' is noticed as soon as the SM is witched on.

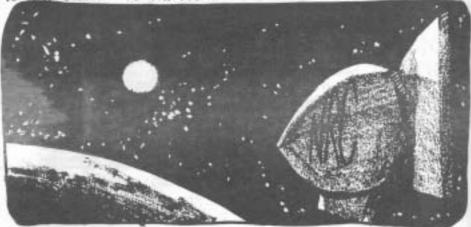


However, I have found an EKGITING USE FOR THE SM2 which Joe Worcester may not have envisaged. I am now using the SM2 mounted about his began and at right angles to, the windings on my own 36 inch loop. The SM2 is connected into the receiver, instead of the 36" loops own inductance turm, and the SM2 induces from the loop's windings in the same way a ferrite rod in a transistor portable will, if placed at right angles under a loop. Both the 36" loop and the SM2 have to be <u>critically</u> tuned to the wanted station, resulting in a multiplication of the Q factor, and it is noticeable that the 36" loop peaks even sharper than before. This results in greater selectivity, and helps pick the signal out from the noise. As the SM2's built-in pre-amp is designed to present a near perfect load to the receiver, as well as a high gain, it gives a real boost in signal strength, which is a real boon to my battery Heathkit Monican which is normally very flat on the BC band. As the original sensitivity is set by the 35" loop the 'white noise' of the SM2 is no problem. Now to the details that may be of some interest. The whole assembly is manufactured by Worcester Electronics, R D I Frankfort, New York, 13340. Three models are available. The SM1 is cheapest at \$3' US; the SM1 deluxe costs \$36 US while the SM2 deluxe is \$45. All are basically the same with various refinements, i.e. provision for tilting for better nulling on the SM2 etc.

(New Zealand Radio Times, January 1973)

# THE CONTINUING ADVENTURES OF, YES, WHO ELSE .... by CARTER SCHOLZ

... BEYOND THE VAST NEWER-NESS OF THE AURORA BOREALLS FLOATS THE ENIGNATIC NAC ZEPPELAN, NEEVE CENTER AND CEREBRAL CORTEX THE WESTERN HEMISPHERE'S LARGEST GROUP OF DEVOTED DX TECHNOLOGICAL PETISHISTS ...



INSIDE THIS IMMENSE COMPLEX, MULTI-BILLION DOLLAR COMPUTERS HUM SOFTLY TO THEMSELVES, CHUCKLING OVER-OBSCENE POLYNOMIALS AND RIBALD QUADRATICS.



THIS IS THE HUGE WEB OFFSET PRESS ON WHICH MILLIONS OF DX NEWSES ARE PRINTED ...



AND EVER PRESENT IS THE LOYAL NRC TECH CREW, THE VERY HEART OF THIS AWE-INSPIRATE BROWNAHA UNDER THE DIRECT SUPERVISION OF CAPTAIN GLATZ HIMSELF!



BELL REPORTS A PRIESS OVERBALL OF BROWL C MAKE IS . 602 HZ OFF FEBRUENCY ... SEN NEEDS THE NEW DETA FIRE HIS \*POST BEHALE BUPPASS PROGRAM ... MERT PLEET IRCA NIPLITATOR ON ERECK FOUR! SCRAMBLE SECURIT

THESE BRAVE LATES MET THINGS RINUING SMOOTHLY UNDER ALL SORDS OF ADMERSE

TECH COUTROL ROOM

CONDITIONS ... FOR INSTANCE.



OUT HE GOES ANOTHER CRUSHS RESOLVED!

WHAT DOES DX MEAN!

CAPTAIN GLOTZ IS JUST LIKE A FATHER TO SOME OF THE YOUNGER LADS ON THE FORCE ...

CAPTAIN GLOTZ, 1 JUST -KANTED HERE, IN THE PRESS ROOM PRINTING DX NEWS, AND I HANG A QUESTING ...

CERTAINLY, CHARLE. WHAT IS IT?



FOLLOW CAPTAINGLOTZ'S BOFLDITS EVERY SO OFFEN IN THE NEWS

## CZECH YOUR COUNTRIES!

## STEVE BOHAC

Frequently, the matter of Czechoelovakia has been raised. One such incidence was the 1938 dismemberment of that republic under the formalities of the Munich Agreement, which annexed the Sudet-enland region of Czechoelovakia to Germany, Teschen to Poland, and on 16 March 1939, a region of Slovakia and Ruthenia to Hungary, called the Carpatho-Ukraine, whose capital was Ufhorod (Unhorod).

On 14 March 1939 Slovekia declared itself an independent republic, quickly followed by the complete annexation of Bohemia and Moravia into the German Heich as a protectorate on 16 March 1939.

Dissolution of the Protectorate of Bohemia-Moravia and the consequent restoration of the Grechoslovskian nation came in May 1945 as a direct result of the German Offterdämmerung. However, the Carpatho-Ukraine (capital: Užborod) was ceded by Czechoslovskia to the U.S.S.R. on 29 September 1945.

A redio enthusiast DX'ing between March 1939 and May 1945 asks the following question: having logged Prague, does be

(1) count it as the country of Czechoslovskis, which actually ceased to exist in those years, or

(2) count Prague as part of the German Reich, or

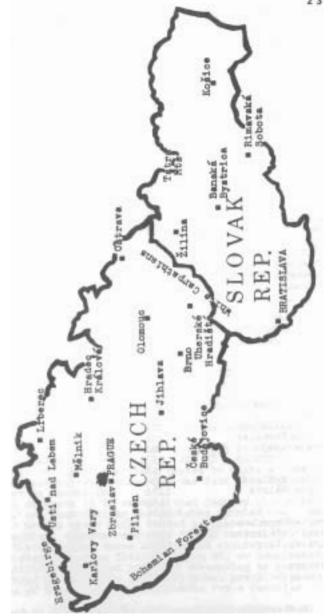
(3) ignore the situation entirely, not counting any country

and cite litigating circumstances ?

On the assumption that Frague was counted as Grechoslovakia and not as an adjacent territory or protectorate of the Reich, how does this Medium Wave DX'er count any of the radio stations in Slovakia, an independent republic from 14 March 1939 to 9 May 1945 7 Also while on the subject of Manifest Destiny or it's German counterpart, how is Vienna counted after the "Anschluse" of 13 March 1938 when Austria was annexed, thereafter known as the administrative unit of "Ostmark", an integral part of Germany 7 Moving to more recent history, we discover a unique set of

Moving to more recent history, we discover a unique set of political circumstances, occurring primarily between the years 1962-1968, which resulted in the creation of a new Federation of Caschoslovakia, consisting of the Casch lands (Bohemia and Moravia) and Slovakia. Legislation was passed on 27 October 1968 by the Caschoslovak Mational Assembly, became effective on 1 January 1969 and grants autonomy to Slovakia within the framework of a socialist federal arrangement, recognizing the co-existence of two equal nations in a common socialist state.(1) Under the new federal system, both nations, the Casch lands and Slovakia send elected representatives to a bicameral parliment, the House of the Feople and the House of Mations. Officially, the Czech lands now comprise the Czech Socialist Republic; Slovakia, the Slovak Socialist Republic.

This federation is roughly equivalent, for a radio hobbyist, to the situation of 1922, in which the Autonomous Soviet Socialist Republics joined with the R.S.F.S.R. to create the Union of Soviet



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Socialist Republics. If recognition is given by the DX community to these Soviet Socialist Republics as seperate countries, consistency dictates that these two nations forming Czechoslovakia be accorded equal footing with the republics of the U.S.S.R. It must be pointed out that criterion # 2 of the NRC Country List states: loosely federated countries, which comprise a larger entity, but which have been recognized, either by the U.N. or that entity itself, as countries, such as the republics of the U.S.S.R. or the countries forming the U.K. ... are included.

Therefore, the following stations represent the new "DX country" of the Slovak Socialist Republic (Slovakia), effective from 1 January 1969, under existing criteria established by various

clubs in the DX community:

#### SLOVAK SOCIALIST REPUBLIC

Banská Bystrica	701	100 kw.
Košice	701	5
Orava	701	ź
Bratislava	701	Ž
Bratislava (Kostolany)	1097	150
Košice	1232	100
Tatry	1232	2/5
Rimavská Sobota	1286	2/h
Rimayská Sobota	1.666	2/4 3•5
Žilina	1594	ź*´

Other stations formerly listed under Czechoslovakia in WRTVH, RBU, FBIS, plus other sources constitute the Czech Socialist Republic (Bohemia and Moravia). These stations are:

#### CZECH SOCIALIST REPUBLIC

Theraké Hradišté	272 (111)	200 hu
Prague	67E (LM)	200 EW.
Usti nad Labem	203	150
Prague-Zbraslav	703	20
Prague-kraj	701	30
Brno	953	100
Pilsen	953	15
Hradec Králové	1232	5
Prague-Mělnik	1286	100
Jihlava	1484	2
Brno	1484	2
Prague-Zbraslav	1520	30
Prague-Zbraslav České Budějovice	1520	5
Karlovy Vary	1520	15
Liberec	1520	2
Ostrava	1520	30
Olomouc	1594	2

Indications have been made of a possible change of status regarding Prague-701, plus an indication of the existence of an additional station on 899 kHz. Pending the receipt of more detailed information, stations will remain as listed above.

# PART II: CZECH YOUR COUNTRIES!

STEVE BOHAC

Attention is called to a thought provoking development, one which ties in with "WHY IS A COUNTRY?" and specifically is the emerging "United Europe" comprised of:

(1) Great Britian

(2) Ireland

(3) Denmark

h) West Germany

(5) France

(6) Italy (7) Belgium

(8) Holland

(9) Luxembourg

The above are pledged by treaty to form a "European Union" or "United States of Europe", which by the year 1980, will decree

complete economic. political and military intergration.

Do political independence dates or politics have much to do with DX'ing? Many stations (countries) remain on the air past their regular schedules on independence dates or during election balloting, as did the Farce Islands-584 and Demmark-1061 on the night of 4 October 1972 during balloting on the question of Danish entry into the European Common Market (2); thus affording the DX'er an extra chance to verify an elusive country. Witness also the well-publicized "DX Calendar" published in club bulletins. Politics and political independence dates have little to do with MW or SW Broadcast DX'ing??

As of 1 January 1973, the nine governments of the Common Market gave up their sovereign right to make seperate trade agreements with the Soviet Union and other Communist Bloc countries. It will be extremely interesting, from a DX'ers point of view, to contemplate country lists as further limits on national sovereignty

are placed into effect.

While agreeing in principle with the truths set forth by Page Taylor and Russ Edmunds in their article, "WHY IS A COUNTRY?" (DX News, 20 October 1972), this article serves to state a fact not covered in the controversy, other than the fact that Bohemia

gave Budweiser beer to the world!

In the overall analysis it is evident that country lists, as have been devised, are anachronisms and fetishes carried over, in part, from earlier prefix lists which tended to place a heavy emphasis on geographical regions or on, as it may be called, the "zone syndrome." History shows these adulterated country lists to be grossly inconsistant; bearing little witness to, or completely ignoring the geopolitical facts of life and attempting to perserve dubicus entities from oblivion due to "traditional practices," with the intention of furnishing embellishments for a peculiar "country mania."

It is important to note that geography, politics and economics, more than language and regional customs, or geography by itself, are the major factors involved for the delineation of a country's

boundaries.

#### COUNTRY PRINCIPAL LANGUAGES, TRIBES OR ETHNIC/INTERNAL SUBDIVISIONS 1. Dominion of Canada French, English, Eskimo 2. Nigeria English, Yoruba, Hausa, Ibo 3. Belgium French, Flemish, Dutch 4. Switzerland Swiss . Swiss - German . French . (Swiss Confederation) Italian. Romansch 5. Ethiopia Amharic. Somali. Arabic. French English, Afar, Tigrina, Tigre 6. Federal People's Serbia, Croatia, Slovenia, Republic of Yugoslavia Macedonia, Bosnia-Herzegovia, Montenegro

Strange it is, indeed, that the majority of radio broadcasting stations, exclusive of non-governmental, religious, commercial and "happy" stations, which have the propensity to represent a particular country, do not forego political pronouncements in their external broadcasts; but emphasize, some quite emphatically, their own country's view of world situations; aiming to favorably influence the people of the world toward that country with news, folklore, musical entertainment and yes, political views. Such is the nature of worldwide radio broadcasting today.

Our despondent DX'er friend of the late 1930's, aged somewhat beyond his years by the ambiguities of casual country counting; logs, tapes and verifies, as an example, the Hellenic National Radio Station in Athens; he counts the country of Greece. If he is a persistent DX'er, as we trust he is, the Greek Armed Forces Station is subsequently deleted from his wanted station list. While this may be an affirmation of one's DX'ing prowess, it makes little difference in the eyes of the DX community, for the purpose of country counting, which Greek station he did log or verify; both stations are, in actuality, Greece!

Consider the following case. For the purpose of country counting again, would there be any distinction made between the Radio Monte Carlo-1232 kHz super-power relay on Cyprus and the lesser powered 20 kw. Nicosia on 602 kHz? Murmurings by U.S. DX'ers have been heard concerning the relative rarity of certain countries, saying that certain new, high-powered relays tend to downgrade a country in terms of rarity. For illustrative purposes, let us say that one of the Scandinavian countries constructed a 1 megawatt Medium Wave or Shortwave station at Thule or Godthab, Greenland to disseminate information and entertainment to the "neglected" populace of the Arctic, polar bears included. Is this station regarded as rare DX? Are the comparable VOA-Greenville outlets of 500 kw. considered DX by European radio enthusiasts?

Bearing in mind the fact that several radio club members and officials have expressed a desire to maintain an interest in the some-times elusive chase of DX'ing and provide an equal chance for newer DX'ers on the radio scene to add stations and countries; where, it is asked, is the "equality" postulate applied to the DX'er who really had to "dig" in order to hear and verify uncommon

countries under the handicaps of yesteryear, in which the super-

"It is a paradox that, in an international hobby, the approaches to DX'ing should be radically different in different continents and countries; so different that even a COMMON LANGUAGE is hard to achieve. How many North American or European DX'ers realize for instance, that when an Australian or New Zealand DX'er talks about some enormous number of stations that he has heard or verified, that this may include the BBC, counted a few hundred times for every frequency he has heard it on; or how many American DX'ers realize that many a European DX'er would count, say, a verification for Radio Vilinus and one for Radio Magadan as being from the SAME RADIO COUNTRY ?" (3)

A suggested solution to the problem of incentives, though not explicitly advocated by the author, might be for radio clubs and ANARC to revise their respective outlooks on country lists to reflect the rarity of specific stations for North American DX'ers. This too, may have it's idiosyncrasies, but possibly in this manner, country lists could provide challenges and real incentives; then country counts could be regarded as a barometer of meritorious achievement. Perhaps on the other hand, the whole concept of DX'ing, as opposed to simple listening, is on it's way out due to the advent of the super-power station saturating the ionosphere with massive amounts of RF power. Is there a "New Frontier" or a dead end for the DX'ing radio hobbyist?

As has been shown earlier, geopolitical considerations, annexation and independence dates have a great deal to do with the radio hobby. These political and economic manifestations have been and will continue to be catalysts, despite disinclinations to the contrary, for extensions or deletions of existing entities, wars of the airwaves, stepped-up transmitting powers, and the augmentation of facilities (4) and the establishment of new national or international Medium wave and Shortwave broadcasting stations in quasi-remote geographical locations; others not so located; all of which may or may not constitute a new country for the DX'er.

#### STATION STATUS

Deutsche Welle relay stations at:

- (1) Malta a 600 kw. Medium Wave and three 250 kw. Shortwave transmitters under construction.
- (2) Portugal Shortwave relay station at Sines, 250 kw.
- (3) Rwanda Shortwave relay station at Kigali, 250 kw.

Radio Nederland relay stations in:

- (1) Netherlands Antilles Shortwave relay, 300 kw. Medium Wave relay via TWR, 500 kw.
- (2) Malagasy Republic Shortwave relay station, 300 kw.
- Kol Isreal increase of 737 kHz to a power of 1200 kw., plus 5 proposed 300 kw. Shortwave transmitters.
- Jordan a new 1500 kw. Medium Wave transmitter under construction in Amman.
- Cyprus Radio Monte Carlo relay station at Cape Greco on 1232 kHz, 600 kw in 1973.
- United Arab Emirates a new 750 kw. Medium Wave transmitter at Abu Dhabi operational June 1973.

From the opposite point of view, should political considerations be relegated in stature to geographical aspects, confusion and controversy will continually result. Why not eliminate these political dilemmas by expatriating the entire country concept, and in it's place, institute the "zone syndrome?" In this way a number of meaningful geographical subdivisions could then reasonably be made, such as the subdivision of Australia (mainland, plus Tasmania), Yugoslavia, the People's Republic of China, Nigeria, Great Britian, the Netherlands Antilles, Czechoslovakia and Indonesia. In addition, this maxim could be applied to any other country on earth, wherever geographical or ethnic whim dictates, thus affording DX'ers the ultimate in DX Target Areas, since "in the end, a radio country list has only this justification, to provide a common standard for DX'ers and an incentive for them to keep tuning for a new country." (5)

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#### AUTHOR'S COMMENTS:

Acknowledgement is made of the superlative DX'ing abilities of the established DX leaders. This article is not meant to belittle any person(s) or group; but rather, it is meant to point out the adversities and inconsistencies of country lists prevalent in the past, with the purpose of clarifying and perhaps, correcting the miscarriages conveyed to DX'ers of the MW and SW Broadcast bands thru the years. It is sincerely hoped that this dissertation will stimulate and bring about a degree of sophisticated rationals, which can be applied to the implementation of a practical "country" list for the parties concerned.

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1400 WJET-PA 0/u 2/22 0126 w/rr (RF)

WINC-VA Think this the one w/tele-talk mixed w/rr AN noted 2/21(WB) WBEC-MA Noted 2/21 w/Bruins-Canucks game from WC, a WBZ relay, hrd 0100+ thru WHK-WBSM. (TRS)

WHK -OH Off 2/26, leaving KTCE alone, no WBSM etc. WOC = to KTCE to its s/off (WB)

1400 While-BJ W/nx, pmg etc. 0012-16 2/24 o/all. Strange (WB) 1440 WROW-IL 0/u 2/23 0157 u/nx, rr. (RF)

1450 unID 2340-2359 s/off w/EL instrs., & several spots for a local Washington's B'day Sale. Call sounds like WLAR. Suspect WLSR-TN but dunno (WB)

WOL -DC Finally -- only 3 years-- 0201-05 2/20 w/ nx-ID-jazz.(WB) TT w/mucho different tones, suspect PoP, mostly ENE/WSW DF 1460 unID here 0130-0245+ but no IDs. KSO-WBNS-WPNX-WOKO-WHEC-WPON all in RS (WB) \*\* What Date??? -RjE

1480 WHIN-GA Finally noted AN w/ Soul. TC 0315 2/19 (dm)

1520 WTU-UH O/KOMA which was way o/WKBW 2/26 0310-0335+. MoR u/mess(WB)

1530 MENY-WY Pulled from u/KFBK 2/26 ID 0231. Whatta fight!! (dm)

1580 KDAY-CA In/out 2/19 0300-0400, must not s/off as in log. (PKH)

\*\* Change it, hi. -RjE

WCLS-GA S/on 0400 2/19, log sez NSP. (PKH) \*\* S/on is irreg, as is SP -RjE

Good w/ rr 0432 2/26 (MG)

WKIG-GA No test hrd 2/19. (PKH) \*\* Nor here. WCLS, etc. ruined it-KLOU-LA S/off 0300 per sked, but still not back by 0537. (PKH)2/19. 1600 WARU-IN 2/25 s/on 0558 w/SSB atop freq. ,emt. 98.3 FM too, no WWRL

audible. (TRS) WOKB-FL 2/25 s/on 0559, heavy signal o/WARU, no SSB (TRS)

WHBT-TN 2/25 0601 s/on w/"Dixie" follo by s/on annots., then into nx This wiped out previous 2, atop to 0615 t/out. (TRS) \*\*Now there's three darn nice catches - RjE

WKEN-DE Believe the TT hrd u/WCPK s/off annct 0230. Had 400 & 1000 Hz and 100 Hz once, no mx. IDs impossibly weak, so called CE and had him make repeating ID which he played 3 times between 0302 and 0305 (during the Irma Thomas & Busch Jewelers spots on WWRL). This did the trick. Back to TT 0307. Sigs. fair at best here, used 500w NDA. Tried 1000 w once ard 0300 but no help here (Foxy)

TEST better than WCPK w/TT (700 cps?) and ID 0239 2/26.(dm) WJNJ-FL Noted w/very strong ET way o/WWRL, KATZ 2/19 w/instr mx, ID

@ 0155 (dm)

WLNG-NY On w/ET-TT-OC 2/20 0025-0045+. Still there 0135+ (WB) WCPK-VA Noted on TEST atop looped WWRL w/vy strong IDs 0224.0227. 0230 (Foxv)

Hrd on TEST 2/26 0200-0231 mostly o/WWRL w/many IDs incl. phone #. Big band mx, fairly good despite pest (TRS) Hrd TEST 0200-0220 2/26 w/jazz-big band mx distinctive from junk on WWRL which made reception fair-poor (MG) Great on TEST, killing WWRL 2/26 0200+ (WB) On TEST w/ fair sig, even w/WWRL, KATZ 0204 ID 2/26 (dm)

KLEB-LA By far the strongest of the three w/ c&w o/WWRL.KATZ 0337 ID in TEST. 2/26 (dm)

Morse IDs helped fair/poor signal (MG)

Fair on test u/WWRL 2/26 0330+ (WB) Hrd only @ 0347 w/ c&w record, one code ID. "Golden Meadow Louisiana "and "Radio Club of America" picked out on voice w/ WWRL talking. Code ID penetrated nicely. (Foxy) 2/26, CW IDs followed by voice IDs hrd 0328,0351,0353,0401. 0351, 53 ones provided best ones for tape even w/ WWRL. Think this one started early, as two TTs on channel 0320+, which leads me to suspect WKEN TEST on, tho' no audible IDs could be heard. TT overlapped WCPK s.off. WMEN unn anyway (TRS) Hrd TEST 0330-0400 2/26,c&w wasn't as strong as WCPK mx, but

No reports of the WUDO-1010 test, even from JMP or TRS. WCNL never answered letter for CPC test, and WINS was off 2/19 instead, so no great loss here. So far, my CPC returns (regardless of answer) this season have beent 4 for 21 and 3 for 16 in two groups, plus the 0-1 on WCNL. PT's is running 2 for 20. Only answers save WUDC were no. tho' some did give f/c times or skeds. -RjE

REPORTERS THIS ISSUE:

Michael Good (MG) - Huntington Woods, MI; SW-4A & AL-4 loop; Panasonic RF-1600 and 45-foot wire.

Tom Sundstrom (TRS) - Willingboro, N.J.; HQ-150 w/ SM-2; DX-150A w/LW. Bob Foxworth (Foxy) - Mineola, N.Y.; HQ-150 w/ 4' FET altaz loop; HQ-129X w/ homemade ferrite loop or LW; GPR-90 RXD.

Wes Boyd (WB) - Youngstown, Ohio ; HQ-180, w/ 3' altez spiral loop wound w/ RG-174 coax.

Dan Myers (dm) - Toledo, Ohio ; HQ-180A w/ 3' box loop Paul K. Hart (PKH) - Ft. Worth, TX.; SX-28A rebuilt w/MFs, 4' altaz loop; Fisher 90T and SM-1.

Richard Frcho (RF) - Cleveland, Ohio ; HQ-180A , SM-2, 100' LW running E-W. Jim Poterba (JMP) - Yardley, Pa. ; HQ-200, SM-1. Relfe Luton (RL) - Elizabeth City, N.C.; SP-600 w/ 1508 ft. LW E-W.

Russ Edmunds (RjE) - Wayne, N.J.; HQ-150 w/ 4' FET altaz loop; Fisher 100T w/ SM-1, 2' altaz RjE loop.

A hearty welcome to a man w/ one of the best Domestic DX locations in the U.S., Relfe Luton. Relfe also owns one of the most impressive lists of stations had from down there.

This week's Insipidity Award goes to Keuffel & Esser, who, recently, in response to a letter from me asking for one Canadian Change list missing from the previous shipment (they number consecutively, otherwise I'd never know) sent not that, but 22 sheets they'd already sent, along w/a few new ones. Another latter was sent for the Canadian list again, w/notation that they'd blown it again. And we wonder where our tax dollars go. Between incompetent government contractors and the incredibly inefficient USPS.....

73m, RJE



RADIO ETHIOPIA ADDIS ABABA P. O. Box 1020 100 ea. Addis Ababa \$73, 6165; 9610 TIMES: M-F, GMT 0330-0600, 1000-1300, 1430 - 2000: Sat. 0330 - 2000; Sun. 0500 - 2000. LANGUAGES: Amharic, English, Somali, Arabic, French, Afar QSL CONFIRMED

Radio Bristol, the first of the second generation of Local Radio Stations commenced transmissions on September 4th. 1970.

Its transmissions on 95.4 MHz are radiated from the BBC's Mendip transmitting site near Wells in Somerset. (National Grid Reference ST 563. 488). The site is 1,000 feet a.s.l. and the transmitting aerials are 775 feet up the 1,000 ft. mast. Maximum E.R.P. from the 'Gates' transmitter is 5kW and the transmissions are horizontally polarised. Programmes are fed to the transmitter via high quality Post Office lines.

The transmission area is approximately within a radius of 25 miles from Mendip, but acceptable signals can be received at greater distances depending on the quality of the receiver, its aerial system and the height of the receiving site.

Radio Bristol will begin broadcasting on Medium Wave on September 2nd. Initially the Clevedon Transmitting Station will be used. The wavelength is 194.

Radio Bristol has 3 studios, each one designed to be self-operated by the broadcaster or controlled by an operator in an adjacent control cubicle. The control desks are of the latest transistorised design, each desk having up to 11 channels available for programme use. The studios are normally equipped as follows:-

- 2 Studer A62 full track 73 and 15"/s tape machines
- 1 Rola Plessey CT80 Cassette machine
- 2 Thorens T.D.124 turntables with Lenco L75 arms and G800 Cartridge
- 2 ST & C 4038 Ribbon Microphones
- 2 A.K.G. D202 Moving Coil Microphones
- 1 K.E.F. Concord Monitoring Loudspeaker
- A number of Ferrograph Series 7 tape machines are also available.

When the station is not originating local programmes, there is a choice of Radio 1 by high quality line feed or Radios 2. 3 and 4 from re-broadcast receivers.

The Station has a Radio Car equipped with a UHF programme transmitter (5 watts on 455.1 kHz) and a communications channel (50 watts on 141.66875 MHz). It has a hydraulically operated 20 ft. mast equipped with an omni-directional aerial system. A flexible two-channel mixer is used to control speech and tape recordings which can be transmitted directly on to Radio Fristol's output, or recorded for later use. The receiving site is at a high point near the studios and the directional receiving aerial can be rotated remotely from the studio control desks. All the Radio Car equipment is operated off heavy duty batteries.

The station is equipped for outside broadcasts and recordings of all types, most of the equipment is battery operated. Magra tape machines are used for complete programmes and Unor 4000L tape machines for short interviews.

Self-operated studios at Eath, Trowbridge, Bristol Police Headquarters and A.A. Headquarters are available for immediate use and there are facilities for live broadcasts from local Football and Rugby Clubs and Gloucestershire County Cricket Club.

VERIE SIGNERS

35

G - J. Poterba A - C. Dabelstein D - J. Critchett H - R. Eddie B - C. Lucas E - E. Wesolowski I - E. Cooper F = W. Boyd C - T. Kerfoot J = R. Sperry 540 WDAK C. Skinner, CE C 1350 CJLM P. Oardin, TD F 1370 WKIK G. E. Clark III 570 WSYR F. Palumbo. S G 630 KSXX B. R. Bush, COp 1380 W SoY B J. Hanley, CE Α XEFB JoseLuisAlcontare.OG A WBEL T. Farber, E G 660 X E RoP M Pedro Mendizabal C.GM E 1400 WICK D. Carrett. SM 710 X E M P (see XERPM-660) W DoUZ u/u W HoM P F. A. Johnson, for C 730 W L O R R. Harris, CE 750 Y MnY Lily Change de Cano, DG A R.J. Rzeszatek, CE K FcQ D V. G. Allred, CB 1410 WBKN H. P. Wallace. CE 1420 K XuO W R. Gipson, PD 360 K FuM B C. Abel 790 WAGE B W. R. Gottschall, CB 1430 WPCF R. Kinney, AE P 810 KWSR N. Price, M D WRNE J. Fischler, CE 860 WANO M. Flack, CE G W D I C J. Mulling G 1440 W J A B W. Volgt. SM WSON S. Chase. CE AFI WAMI J. Heath. PD C FfG O H. F. McRae, CE 870 WFLO J. Wilson, M 1450 KVSL R. D. Zellmer, O A WKIP G. W. Brooks, DOE 900 W Fall T. D. Moyer, CE X E W BernardoSancristobal, GG AE 1460 CJOY L. Smith, CE 1470 W V O L W. Robinson, CB WAFC A. Fletcher. CE G 910 WNCG R. Corona, CE G WFAR S. Aron. COD G 1480 K RFE D R. V. Barnett, M WRNL S. Straus, CE WYZE R. L. Leake, CE 920 K Was D T. Ingstad, GM A WHON C. Freedbury, SuE 930 WJAX D. Preston, CM G 940 WIDG L. James, GM F 1490 KDBM B. Oliphant, M WGAL H. Peters, SM KBRE C. F. Hunter, PD A 1500 X EaR H Same as XERPN=660 G WIBX J. Dowdell. E 1520 K MoP L E. J. Alexander, CE 960 X E K EdwardoVillarreal M, GE 1530 KNBO J. H. Butler, PD WERC David Gleason, PD F E WTHM S. Sheill, CM XEDF (see XERPN-660) 1950 WRPM (J. W. Taylor, R 980 K CrI J H. Sell. GM A (Cheri Jones K 1000 X EgO Y J. Garcia, P A G 1550 WPTH R. Cox. CE 1070 WKOK J. Keller, VP G 1080 K H A I Marjorie Russell, PD WIRV D. Cox, CE D WEXT J. Eppler, CE ₽ 1090 K AQA Y F. McDonald, CE WVAB D. Berlshim, SM KING F. Benzon, CE G 1570 CHLO J. L. Moore, P. GM HIJ 1100 Z DoK Ivor Bird WCRL T. Batty, CE G 1110 WJML G. Casey, GM 1580 KPCA M. Eughes. PB G 1190 KPAR P. Howard, IDM A WKIG D. Cobb. GM G 1210 W IqL Y D. Miller, WH WEYY J. Woodmard, P G 1220 WFAX M. Miller, CE G GJ E WSUP W. Wicks, CE X E B (see XERPM-660) G 1240 WROVA. Beckley, CE KLTR (Connie Snow, S G (H. M. Higgins W B A X P. Kelley, E G X RqD M CarlosVRodriguez, CR A 1260 W BrB K W. Foster, M, CE WPUV J. A. Columbus, P.CE K F WCHV F. Whitehead, CE KDAY A. Laird, CE 1270 KDJI W. Lowe, GM A 1590 WGRY M. Hall, E F 1280 W C P M G. Bibb, CE, M F 1600 WCPK C. Payne, O, P GI 1290 WHGR P. Lucke, Audio E #830 HIJB Pedro Santana J. 1300 WBLG B. Corey, CE 1310 W IpF E M. Smith, CE Send in your recent verie signers, & WORC D. L. Coleman Jr., CE please do not include those recently KFSB R. D. Chegwin, P P listed - repitition does no service to W L O B D. DaBree, CE

1330 WFBC R. Gleson

KWWL E. Fink, VPoE

anyone! Please double-space and list

frequencies & type of verie & position

of the signer, with our one-letter abbr.

RICHARD NOEL ALLEN - Billings, Oklahoma - 74630

Greetings from Red Carpet Country. DX is still good out here on the prairie, but the static is increasing, as another Winter ends. According to DX Monitor, 2/17, XELO is now XEROK again. Midday DX 2/17- KCRS-550 Midland, u/KFFM & unID w/poor signal @ 11:14am. KHOW-639 Denver, fair @ 1:32pm. KMOX-1120 poor @ 1:50. Nighttime DX: 2/7- KMAC-630 San Antonio, fair w/c/w & no KHOW @ 7:12pm, "The Nightlife Sound of Night People." WOR-710 o/WHB w/fair signal @ 10:04pm. 2/11- CMIV-900, Ciego de Avila, u/CJVI w/"Ia Voz de Cuba" @ 3:30am. wkis-740, Orlando, o/KCRs w/NX/WX @ 5am. 2/12- CXWX-1130 Vancouver, w/excellent signal & o KWKH @ 3:10am. While I listened to CKWX, they received a call from a girl listening in Tupelo, Miss. CFCN-1060, Calgary, fair w/WNOE off w/MoR @ Wam. CMHQ-630, Santa Clara, fair o/KHOW w/"la Voz de Cuba" @ 5am. 2/18- WDMA-1150, Lima, poor u/CKOC v/rr @ 3:28am. CJOC-1220 Lethbridge, fair o/XEB/WGAR (testing) w/rr. CHML-900 Hamilton, poor @ 5:14am. 2/19- KFVS-960, Cape Girardeau, w/KMA @ 1 s/off-SSB. KMA-960 Shenendoah, good @ 1:01 s/off-SSB. KSAC-580, Manhattan, excellent w/ET/TT plus many IDs, after s/on @ 1:27am. CKRM-980, Regina, fair w/ c/w o/KFWB/WYOO/KMBZ (testing @ 2am) WYOO-980, Richfield, Minn. ppor u/CKFM/KFWB w/KT/TT, plus many IDs, after s/on @ 3:20am. KAYQ-1190 Kansas City, good w/K-Q HX @ 3:56am. Unid-1190 u/KAYQ w/NX @ 4, KEX? Unid-1190, probably KRDS, good w/ KAYQ nulled w/c/w @ 4:05am until KLIF s/on after ER @ 4:10. 2/21- KLEC-800, Oklahoma City, poor u/XEROK/CKLW running f/c @ 2:1lam. Reports to KLEC CFCN CKPM C CJOC. v/qs from CJBC CFRW WCCO WJR for midday MK, WERC & KTGO for TESTs. DX on Pioneer SX-300T and SM-2. I noticed in the paper the government of Argentina will sell most of their radio stations to private companies. My thanks to everyone who has written to me. I will answer as soon as possible. Good listening.

PETE TATLOR - 1039 Erica Road - Mill Valley, California - 94941

1/16- Due to storm & floods, KDMA off, so log taken on KBUZ-1310 @ 7:25-7:45pm. Also noted but not logged due to lack of commercials was KKGF, Great Falls, not yet KEIN. (GPN Note: KKGF is U-1 in Night Pattern Book but U-2 in NRC Domestic Log). (That makes U-3, hi -ERC) KJAY-1430 logged same day 7:52-8:08. Veries for both 1/16 KBUZ & KJAY reports in 1/26. KBUZ says "In 25 years I have not seen a reception report that matches yours in neatness and detail. It is without question the finest I have ever received." The report I dent wasn't that big a deal, but I think station people appreciate reports they can relate to program logs or mx lists, so I put the commercials in caps & in red & indicate their length (60/30/10). Also, their format is like that on KFOG/WJIB, so I knew all the selections & artists, & that helps. I think song titles should be included; most stations don't keep a log, but with three or four titles, the reader can tell if you are on target. The handwritten verie from KJAY said "Thanks for catching KJAY - one of the two great stations in Sacramento." As for mail service, DX NEWS #15 dated 2/14 & postmarked at the Boston airport facility 5pm the same day, arrived the following day at noon PIT air mail. On 2/17, KAOR/KONY-1340 7:30-7:45pm but I couldn't separate them or get any commercials, & KASA-1540 solid o/KPOL 8-8:15pm s/off but not enough reportable material. And firelly on 2/19, KDB-1490 in the clear w/wall-to-wall mx @ 3:15am. Wall-to-wall mx is like that on WPAT-930.

SSgt. E. BRUCE REYNOLDS - Box 3082 - HQ FEN - APO, San Francisco, Calif. 96267

I don't really have anything to report, but I had to
write in and nominate Dan ,yers as the most resourceful DMer of 1972. That bit
he used to get KPCS was the best thing I've heard in a long time. One addition
to the new WRTH: (delivered direct from Denmark by Lars Ryden). FEB-Chitose
(near Sapporo) is still on the air, 1570k, 250w. It wasn't included in the WRTH.
I definitely have the urge to get back into the DM scene, and hopefully I will,
next Fall. Sorry to hear that Roger Winsor is hanging up the headsets. What ever
happened to Jerry Conrad? Welcome back to John Callarman. Take care all, good DM.
ERC, congrats on WHN going c/w - It's about time someone there did it?

BOB FOXWORTH - GPO Box 2111 - New York, New York - 10001

IN from my Nassau Co. location continues good at times, depending on how much time is available for listening. I noticed some Auroral CX on 2/23-24 with some interesting IA signals in but nothing really unusual or needed. DX on MM 2/19 seemed very poor & noisy for the most part, & I seemed unable to hear anything good. WFIL was noted off/on w/TT but after talking to TRS. I helatedly

found I missed an ID from WIND-560 @ 2am, a station I've never once heard in my 15-year IXing career. I did note WOIK-1090 KTing around 2:25am. What gave them away was an apparent AN show on FM or perhaps a tape of an earlier program being played, including a spot for an X-rated movie in Jacksonville & a quick call mention. They seemed to be on quite a while, usually with records outting on & off. I did note what I took to be Camary Is. on 1097, & two TAS on 1106 at about the same time, but that was all, TA-wise. A very frequency-selective TA opening, perhaps. On 2/26 DX was much better. I was surprised to hear all three 1000 TESTs here (not counting WING). Using the altaz loop, I could mull WWRL down to the point where their skywave overhead return was about equal to their nulled groundwave. In other words, from way o/S-9 to S-7 or so. This allowed WCFK to actually override WWRL here. WKEN was much harder. I got their tone CK, but no voice, so I called Rich Camberg there & had him make a repeating ID cart, which he played three times between 3:02 & 3:05, while WWRL had the Irma Thomas record, the the Busch Jewelers spot. If you heard the repeated WKEN, Dover Del. at those times, thank your truly, hi. Rich was trying to get rid of a bad ground in the studio wiring, & was actually ETing, and not just running a TEST for us. Finally KLEB was logged w/a gal c/w record, one K-L-E-B in code penetrating very well, then "KLEB, Golden Meadow" appears discernable just after, then the words "Radio Club of America" heard in a pause in WWRL's NXcast, then another gal record, at 3:47. Tapes sent to all three. The 1010 TESTs were not noted & I suspect maybe they were canceled because of WINS' being on. (They were silent 2/19). Finally, a very weak carrier noted on 1385 around 4:40am, appeared to loop exactly E/W, detectable on RFO only. If this isn't Caribbean it could maybe be the newly-reported Canton Island station on this frequency. This island, at 1710 40 W, 20 50 S, has DUAL country status. Hams operate from there with both the VRI and KB6 prefixes, so if you hear them it may or may not be a new one. The VRL or British government counts the same as Tarawa counts, but the American government would be separate I would think. Since this station is an AFRIS & not a EFRS, I'd think this would be a new one. Chances of audio making it to the E on this one seem very remote. Finally, who is this Mike Collins I heard doing the NX on WICC last Saturday eve, hi hi. 73.

419-726-4348 DAN MYERS - 2650 104 Street - Toledo, Chio - 43611 Not much in the way of DX to report this time, so a rather abbreviated report. I have been putting in 34 hours a week at WLQR, all nights (There goes quite a bit of DX prime time, hi), as well as classes & daytime work (I also have to get a little bit of sleep) so that's why not much DX. I don't expect the hours at WIOR to dait much longer, since I think the boss hired someone to take this shift finally (I am definite replacement for last guy who left), so I will be getting back to more DXing. I have managed 82 new stations this month, though, mostly due to MMs, when I have been consistantly getting about ten new ones each time. All DK is in DDKD & IDKD, so only the "goodies" here (don't feel bad, ERC, I saved the best for you!) 2/19- 3:50am unID, Impresume WCNU, running Tokens' (or Happenings, hi) album straight through; put in commercial for Big Daddy Restaurant, still no IDs given @ 4. I tuned away & by 4:10 off - phone company says Big Daddy listed for Belleville, a few miles from Granite City; St. Louis people, help! Also 2 /19 on 990, unID running Big Band type mx from 5-5:30am, then off w/no IDs. I listened to 5:45 but they never came back, very strong here, way o/WNOX - help, anybody? 2/24-11:51pm, I logged HRIN-715 Ia Chiba, w/many IDs & what I believe was promo for new frequency - ran it after every record; mentions R. Ciribe "recuerda10--- & Jueves, & I have it on tape if anyone wants to hear it. 2/26- A good worning for 1600, hi, as three out of four TESTs heard. Strongest was KLEB, then WKEN, then WCPK. Nothing at all on 1010. I missed KSYL, rats. Four r/cs (new ones for me) heard also that morning, & also KCHY-1530, fighting it out w/ I also have to go back & list n to my tape, as I may have Colombian on 1550, or at least 'twas SS. I forgot one: UnID-1595. I think it was probably the Colombian w/BKB in SS @ 11:30pm on 2/24, no IDs before their final fade (never to return, hi). That's all for now, so 73s & best of DK.

BRIAN VERNON - A917-75 Thorncliffe Park Drive - Toronoto M4H 1L4, Ontario
Not many new ones this time - veries are very slow in coming. I
logged 2020 2/22 - local CHUC! Note-able catches recently include: KGLC-910 @ 3
am 2/16 w/NX "Forman George Report." WSUN-620 @ 3:24am 2/19 for State #29. Later, WRIZ-1550 w/TT & ID @ 4:05; WMAN-1400 w/test, ID @ 4:43; WFLI-1070 On 2/20 w/

rr & test ID 6 4:59am, just before CHOK s/on. CKFH was off 2/23. I heard distant TT on 1430 6 4:20 w/mo ID )darn), CX were terrible here that morning. Veries have come in from CHOK-1070 Ont. w/lots of holiday info; WWSW-970 Pa., WAVE-970 Ky., WNOX-990 Tenn., WNIA-1230 & WYSI-1400, N.Y., couple of near locals there but they all help the totals, hi. Well, that's about it right now, so 73s.

JIM RKID Jr. - 4 Clancy Street - Swansen, Massachusetts - 02777 More DX in 73. Graz-1394 noted on 1/6 @ 12:36 fairly strong w/ German talk by woman; 12:50, Parcelona-737 poor in SS w/an American easy rr song At 1, WFLI-1070 noted testing on 50kw rig w/hard rr. Unn W. Germany-1566 very strong @ 1:10am, like a semi-local; 1:22, WERE-1300 ID heard u/WFBR w/talk show & male announcer & WAVZ not noted. 1/7- R. Turrialba-1525 noted fair w/upbeat SS vocals. The WCMG TEST was of course well-heard here w/lots of old rr hits, plenty of IDs and plugs for the NNRC. Two other much-wanted logs were made this morning in WOKJ-1550 w/ID @ 1:13am & "More mx power" & lots of Soul, heard first w/CBE OC, then alone on top' and finally, WIAC-1510 ID w/a long commercial, a song @ 1:30, then WMEX TT. There are two stations on 1600 which I am finding difficult to ID, around the midnight hour. One of them s/off beginning @ 12 w/ three sumg verses of SSB which lasts three or four minutes before finally going off: the second station s/off with just a regular SSB w/no vocalists, beginning @ 12:10am. The only thing left is a certain WWRL mixing w/WKEN which is noticable. WUNR is mighty difficult to receive here, but has been logged, & I doubt if WUNR is one of the s/offs. Any help on either of these two? During the day, WING ususally dominates 1600. Totals here now stand @ 524 total stations of which 495 are active; 28 countries, of which 27 are now active on BCB. Best of DKing to all this year & 73. (I'm intrigued, Jim - which one of the 28 ISN'T active?-ERC)

JIM POTERBA - 949 Queens Drive - Yardley, Pennsylvania - 19067

Greetings, all. First, to get recent veries out of the way: KDDA KPIP CHAM WING WELV WGRY WROW WASA WANV KVOO WIQX CJBC PJA6 KCMO WEED XERF XEVIP WEJL WMHI YVLX & WFNC. On to DK: 2/14- WGNT-930 2:30am, WOTT-1410 5:58pm. 2/15 - WVOB-1520 5:44 s/off. 2/16 PM- WCH-1310 5:31, WARR-1520 5:50. 2/17- KAMI-1580 ET 1:05am, tentative KEYZ-1360 1:35am. WHUN-1150 5:39pm. 2/17 PM- Two pirates here, the first, WEMJ-1620, is probably Edison High (Edison, N.J.) while the other, WORK-1610, seems to be, according to other bearing I've heard of, in SE Indiana or Kentucky. They run 100w w/c/w, getting out well. 2/18- WPUT-1510 s/off 5:30pm, Timms-1394 very strong, 5:55pm. 2/19 AM- WPGF-1470 12:25, CMKD-1210 all AM, WMWI-1080 TEST 2am, WOW-590 3, KWKY-1150 1:34. 2/21- BBC-1295 lam, WWNC-570 3, KWK-1380 3am, WEMI-1360 6pm. WEBB-1360 5:46pm, 1538 strong AN. 2/22- WASC-1530 6:01pm, WIZS-1450 8:06pm. 2/23- WLOP-1370 6:15pm. 2/24- WKVA-920 5:58am. then, in the PM, Urumchi-1525 very good, thanks to Page Taylor's tip (Continent 45), and 8RG-760 doing nicely all evening atop WJR. (Who's that, Jim. R. Demarera? -ERC) TIFC-1075 @ 10pm. 2/25- WACK-1380 running AN, I believe, and WDCJ-1220 s/on 6 7. In all, DX has been rather good, especially thanks to Urumchi-1525. Lots of good TESTs coming up - I just hope that all of them go off the way they should. That's all this time, so 73s & C U N14.

JACK WYATT - 33 North Keeble Avenue - Apt. 12 - San Jose, California - 95126 I have been a happy member for the last two years. Most DX has been on a TRF-RX that has outlived its usefullness. I have a little money now & would like to step up to a quality RX. I have a problem though. I also like to SW & can't afford an HQ-180 or SPR-4. I have a friend from whom I can buy an almost new Allied SX-190. It's considerably cheaper in price than an HQ-180 or SPR-4 1 according to Popular Electronics & QST is a darn good RX. However it doesn't er BCB. I would like to know if it is possible to construct a converter that enable the SX-190 to cover BCB. It can cover all SW BCBs using the proper cry tals. I would think a converter could be produced for BCB perhaps utilizing a Drake SPR-4 BCB crystak. I know several hams who would like to BCB DX but who do not want to invest in another RX. I would appreciate any help you can give me or perhaps refer me to someone who can. Happy DXing! (This was a letter to ERC, but I do not know anything technical, and so I printed it here hoping someone out there will be able and willing to answer the questions Jack asks -ERC)

BOSTON IS A SUBURB OF CAMBRIDGE AND ALSO OF WATERTOWN. WHY NOT COME TO THIS YEARS N.R.C. CONVENTION, IF YOU LIKE THE SUBURBS? HAVE AN EXCITING RIDE ON THAT THING THEY WROTE THAT POP SONG ABOUT - YOU KNOW, "DING DING DING WENT THE TROLLEY."

