"Please accept this for renewal in the National Radio Club... I allowed my membership to lapse in September and since that time I've sorely missed the excellent information provided by the Club."

(Chris Lobdell, Mass.)

this time...

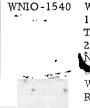


MW Signal Paths, Part II: The Basic Seasonal Pattern - G.P. Nelson The Texas State Network - Paul Hart Second Half of NRC Abbreviations List - HQ Staff

welcome!

- *Jerome J. Buckler, 29 Parkview Dr., Plains, Pa. 18705
- *Phil E. Crocker, 28 Elm Street, Fords, N.J. 08863 (Rejoins)
- *Charles J. Howland, 279 Clover Lane #3, Columbus, Ga. 31903
- *Stef Krieger, 19 Tabor Pl., Apt. 2, Brookline, Mass. 02146 (Rejoins)
- *Chris Lobdell, 149 Walnut St., Reading, Mass. 01867 (Rejoins)
- *Arnold F. Retzlaff, 202 Taylor Rd., Elgin, Texas, 78621

Welcome to the NRG, gentlemen, we hope to be seeing your reports often here in DX NEWS. Your New Member Kits should be reaching you within a few weeks. Those new members in the Greater Boston area are invited to join the rest of the Publication Committee for our weekly meeting on Friday evening; visiting DX'ers from out of town are always welcome to stop in and give the crew an assist on publication night.



Will test with 500 watts from Niles, Ohio, on Sunday the 15th of March from 0230-0330. Programming will be Top 40 with tones and plenty of ID's; calls accepted at 216-545-4024 (NO COLLECT CALLS). This one has a N-S pattern and will be a good catch in many parts of the country; it's expected that both NRCer's Jerry Starr and Wes Boyd will be on hand at the mike. Reports c/o John Ryan, address as in NRC Domestic Log. (Jerry Starr)

The B.P.C. still definitely plans to make FET Altazimuth loop kits available at the earliest possible occasion to NRC members. Publication of DX NEWS and production of the new NRC Log have to take priority, however - and this is the reason that we've had to postpone the kits temporarily. Watch DX NEWS for the latest info on loop kits... *GPN

NOTES: WRAN-1510, is the next BIG DX-Test for us, this one with member Russ Edmunds acting as host. Telephone calls will be taken, and Russ will give the number on the air. There will be some underground music, and there may be some Morse Code IDs to help everyone ID this signal. The station will be using its daytime 10,000 watts and its nighttime 500 watts, both durectional with the same pattern. There is expected to be interference in the East from the French Canadian station, and after 3:00, the West may find this channel ipen and thus the boys out there may have at least a chance at logging this seldom-DXed station. Let's support Russ with a bunch of letters and phone calls! Tune in!

WTXL-1490 will be on with "listening tests" between 1:30 and 4:30, using its daytime 1 kilowatt, and its nighttime 250 watts. They have notified the leading DX clubs about this program, and notified us via Charles Mohr of White Pains, N.Y. They had a similar test on 2/23 which we did not know about in time to notify you. WTXL is different from most local channel stations in that they are 1,000 watts daytime, but directional, and are 250 watts at night, non-directional! Wd don't know what they'll have on the air at this time, so let's tune in and find out. Send your reports to Mr. Smitty M. Kaye, Program Director.

WCPK-1600 will be testing with some music, some cycle tones, and frequent announcements, including station IDs and reference to the test. CJRN & WWRL will render him a bit difficult, but we hope most of you'll be able to hear this test. Send reports to Mr. Charles F. Payne, Omner/President, WCPK, 500 East Liberty Street, Chesapeake, Va. 23324. Information received from NNRC's (and NRC's) John Tweedie.

HEARD SINCE LAST ISSUE

560	WCKL	Catskill, New York	1430	KTYN	?
		Grand Junction, ex-920	1530	WFIC	Collinsville, Va.
1420	CKDY	?			Ex-680, began 2/1

A SUGGESTION AND ARGUMENT "FOR"

In a few weeks, we'll once again revert to Daylight Time. Virtually the whole country and Canada go on the "fast-time" and E.S.T. and all standard times become obsolete and cumbersome. This is part cularly true when trying to describe the dates and times of early Monday morning frequency checks which were after midnight EDT but before midnight and thus still Sunday night, on EST. DX NEWS has always remained on EST 12 months a year - but reporting times during the Summer now becomes somewhat confusing. What do you say NRC follow the trend of the times we live in, and in Musings, SWITCH TO EDT this time? That would mean that for those in any time zone, DX NEWS times a uld still be the same differential as always, except in the two or three statew where Daylight Time is not observed. Let's kick it around in Musings between now and then, but your Editor favors using EDT during that time. Another thing using EST does is to help foul up the new f/c lists for its author, Joe Fela. Daylight Time is the IN thing, mo let's move with the IN crowd and be abreast ^ the times we live in - QK? In the meantime, it's EST and let's have those Musings, boys. No mail here 2/22. As do poxo Editor Ress Edmands & former Editor Randy Kane. So do I; how about if I get us some makeup sheets with "times on this page are EDT" in small type in the corner of the page? IDXD poses a separate problem; how about 24 hour clock GMT?

MUSINGS of the Members

Ernest R. Cooper 438 East 21st Brooklyn, N.Y. 11226

DAVE WHATMOUGH - 284 Main Street West - Hamilton 12, Ontario

Since last report, eight new veries have arrived: v/1- WMEN for RLA Special, CHWO WEMD WSSA KECK for last year's DX Specials. v/q- CBEN CBT (Nf1d. #1 & Province #10) & the N.B. beacon on 530. Total now 1,583/678. 1/30 brought ET of new WCKL-550 in Catskill o/WFIL 12:26-1:03 w/Roy Acuff & Kitty Wells records. 1/31 PM- CBT-540 w/CBEN 7-9pm. WIBS-535 in well until 10:06 s/ off. WISY-790 Wellsville u/CHIC @ 5:30. 2/1 PM- WIIX-540 finally heard until 5:30 s/off. 2/7- R/cs heard per list: WHIS-1440 WPRT-960 & WERN-1460. MM 2/9-A wasted morning until 5am s/on of WATR-1320. 2/11- WSPA-950 o/WWJ/WKAZ to 12:15 s/off. WIS-560 on later now. s/off @ 1. CKCN in w/WFIL xfter WIS s/off. 2/14-I finally heard r/c of WCCR-1580 for call change, but accurate log impossible thanks to pest WPAC who ETed w/TT instead of mx this time. MM 2/16. only Special noted was unn WHBC-1480. KFRE-940 blocked by CKOC image which is getting worse day by day & the Dep't. of Communication still sloes their eyes to the fact it exists everywhere within a 50 mile radius of Hamilton. No sign of WMV0-1300. fust WERE/MAK & en SS YL announcer. I sent reports to the HT duet on 730, WIAR 2 WMC. bold in W/S-, signals o/WAKY/WOXI. I also reported r/c WHCS-11-30 & WKCX-31) Who light will ou 3:50-4:10. One ID, @ 3:58. KEX-1190 heard again but still too rough to copy, @ 3:30.

MARV CARBER - 2539 Kessler Boulevard - Lincoln, Nebraska - 68502

Hi everyone! DX: MM 2/16- WCNE-1480 logged & reported for f/c, IDs every minute, 1:30-1:40am; WHBC-1480 DX noted w/ID @ 2:08am after some polka mx, then TT/OC for next 15 minutes w/no IDs. Some QRM from KBOX. CJDV-910 well atop channel w/c/w & hymms 3:05-3:23; WBIR-1240 w/f/c & many IDs (phometic) 3:42-3:48 tune-out, obviously using daytime power as they really cut through the QRM. Becking up a bit, MM 2/9 saw CFAC-960 finally make it w/c/w AN 2:33-2:52am w/ KOOL/KABL looped. None of the TESTs heard here (i.e. WCSR WCVR WSNO). Whoops, I forget about KOFO- unn anyway. SM 2/15- I found XERF-1570 off again & CHIO dominating w/rr announcing 10kw, 2:22-2:43am. W/CHIO looped, I heard one ID from CHUB 2 2:46 but not enough for a report. CFOR was apparently off so the station u/CH O (when loop was NE) was probably CKIM. Some veries in: WWSD-TEST KNWC KOOK WDR-1586 St. Pierre-1375 KASL-TEST & (hush) WHO. Tarawa-844 carrier noted the past coulof of MMs but not enough to report as yet. This baby gets out! Congrats to Alan Merriman for logging this one! Good catch! A belated welcome to Carl Dabelstein - let's have a Musing from him! 73. Keep up the fine work, ERC.

DAVID SHAPIRO - 1812 Hillsdale Road - Lynchburg, Virginia - 24501

Veries: KFI-640. This one makes a new state for me. Two weeks ago I heard a man who was a prisoner in Cuba u/Castro wpeak about his experience. He said the major priority of Castro's government is propaganda, & that explains why you DXers alveys are bugged by the Cubans. Speaking about future Convention plans for the NRC, I am withdrawing my bid to host one because I am mot in any position at this time to do so. I was sort of confused about it because I didn't think there was much to hosting one, but I was wrong. Thank you, Ernie, for making the hosting duties clear to me because I do not want to put myself in jeoparady with the Club. (No such thing, David - We understand - ERC)

JOHN JOHNSON - 318 Washington Street - Hoboken, New Jersey - 07030

A few more added to the old log. WEAW-1330 Evanston, Ill. WEMB-1420 Erwin, Tenn. WCVU-1350 Portsmouth, Va. WKOY-1240 Bluefield, W.Va., WBOY-1400 Clarksburg, W. Va. Nice signal on 555 a few mights ago. I believe it to be the Nicaraguan. Also the usual amount of splits cominh in nightly I&C.
BEGIN TO FORMULATE YOUR VACATION PLANS TO INCLUDE LABOR DAY WEEKEND'S NRC BASH!

PAUL K. HART - 2105 Muse - Fort Worth, Texas - 76112

The past three weeks have been just about a complete loss. I have had an extensive bout w/the flu, throat infections and the like & have been feeling rotten. Later this week I am taking the family to visit my family in Albuquerque. I hope that will help the cure a little. Doctor has told me to get lots of sleep and rest, so DXing suffers a great deal. I can find no correlation w/CX in Hawaii as reported by Wood & here. I have been monitoring 1040 remotely every SM during WHO's SP with an excellent loop angle & only very minor interference from R. Tropical. So far I haven't heard anything from KHVH - not even a nibble! I did get a reasonably good tape of KORL-650 on 12/25, though, so I guess I'm lucky at that. KRLD hax not been off MMs this month as they said they would, but I am sure the tests have been delayed. I will be in Albuquerque 2/23 so I will probably miss my chance at WTIC. Concerning the changes in station data on P. 36 of DX NEWS for 1/3/70, I visited WBAP/WFAA today (2/16) to inquire. The move is obviously because of the new regional airport - their present antenna farm is adjacent to the site. They are moving 35 miles NE to a location near Grapevine reservoir. The 570 XR now uses three towers in a row & they wre 900 tall (electrically) which is unusual this low in the band. The present 820 antenna is 180° tall and is separate. The new patterns on 570 are very similar to those now used, & a similar three-tower setup will be used. They will have to diplex the center tower with 820, however, and they will be limited to 500' & as a result will have to use top loading. The 50kw 820 license will stay U-1, not U-4, but they expect their radiation efficiency to suffer badly on both frequencies. The airport is not due for use until late 1972, so at this time we cannot know how these changes will affect their hours, etc., but I will stay in touch & try to let everyone know. If you are fishing for the 570 signal, get it now - it will never be this good again after the change.

AMN EDWARD ERUCE REYNOLDS - Box 2637 - CMR2 - Sheppare AFB, Texas - 76311

I have received my HQ-160 & am DXing w/it now. It's in great shape & works well. I'm in the process of building a loop. The worst part of DXing here is the HNL & TVI. MM 2/9- KCFO-1220 and old friend Bob Davis were o/u XEB during PoP around 2am. 2/13- WAPI-1070 good @ 7:30am. 2/14- KPIK-1580 c/w @ 7:21pm & YSS-655 @ 8:28pm. MM 2/16- CFRW-1470 atop @ 12:58am w/NX, KWK-1380 w/R&R @ 1:05am, WKOG-1560 beautiful signal & good c/w on ET @ 1:11am, HJDK-750 @ 1:30am, CKFM-980 w/KMBZ off @ 1:50am, umm CKX-1150 w/'Mx Till Davn' @ 2am, so apparently now AN-7, CKWX-1130 (Province #6) @ 2:02am, KWSU-1250 (State #35) s/off 2:14am. WAKR-1590 @ 2:30am, KKHI-1550 s/off-SSB @ 2:59am, KMPC-1560 s/off-SSR @ 3am following gospel mx, KFEK-1530 good @ 3:02am, WMVS-1390 u/KCBC @ 3:16am, WIRE c/w through OC (KELI's, I nelieve) @ 3:18. And WGY-810 @ 3:30 w/ nice signal. Total logged mow 298. WOC-1420 MM s/off is 1:25am, returns @ 5:55 am. 73s, and good DXing.

BOB KARCHEVSKI - Box 3151 - Daly City, California - 94015
2/12. Hi. I logged WHAS-840* (*-verified) on 2/2 from 5:31am
to 5:49. On 2/5 I logged KBHF-900 Fresno 8:25-8:32pm s/off. I logged KTMS-1250*
Santa Barbara 8:36-9:01pm. 2/9- I tired for KOFO-1220 TEST. I got some tones u/
CKDA which I logged 2:39-3 10am s/off. By then KOFO was off. I logged XEC-1050
3:13-3:30am. Backing up to CKDA, their s/off announcement says they are 25kw,
not 50kw. as in NHC log). KCMO-1000 running OC @ 3:40am. I logged CFRB-1010
Ont. 3:40-4:35am w/KDJW (Texas) testing 3:40-4am. HLWW was also testing about
that time. 2/12 - I logged KFWB-980 Los Angeles 8:50-9:10pm. 73.

ALAN MERRIMAN - Box 6 - Fairfax, Virginia - 22030

R. Nordsie International is on the air on 1610k, heard quite well have on 2/17, 1:302am, mostly current rr. Announcements are in EE/GG/Dutch & Dominican on 1560 is HIJC, R. Maiba, ex-1550. Station on 1097 2/16 definitely was In Voz de Madrid, two clear IDs given by YL heard. 73s. SET YOUR SIGHTS ON HASEROUCK HEIGHTS! SEPTEMBER 4-5-6-7! COME ONE, COME ALL!

MORRIS SOREMS'N - Huntington Resilience - Ingrentian University - Olderly, One. to home to Castale Cat. The a New targe recently & managed to log some DX. 2/6- WDEE-1500 (ex-WJEK) Mich. logged for call change, 11:23pm. MM 2/9- No go on Specials. KIRL-1460 Mo. logged on Er w/old rr (mostly Little Richerd recrods), 1:23-2:01 tuneout. 2/10- WCOY-1/80 Pa. noted briefly, 4:59pm. OSIs received: v/q- CFAC-960 Alta., CBU-690 B.C., WJWL-900 Del. TEST, WSBA-910 Pa., CKOY-1310 Ont., WIBA-1310 Wis., WFJR-960 Va. v/1- WDAY-970 N.D., WKND-1480 Conn TEST, CKAC-730 Que., (in FF in reply to report in that language). v/f-CKEY-590 Ont. All these verifications except the one from CKEY-590 were for reports sent over the Christmas vacation. The one from CKEY was in response to a report sent in 1/69 - no f/up! Pefore closing I would like to say I am sure few Consider would agree with the reserve mose by Frank La Belle in the 1/31 DX NEWS. Sure, we have our problems in Canada (what country doesn't?) but there are also many aspects of this country in which we can take great pride. To the best of my knowledge there has never been any serious talk of Quebe becoming the 51st State. The majority of people in Quebec are French-Canadians who naturally want to preserve their own identity, language and culture, something they would be unable to do in an entirely EE-speaking nation like the U.S.A. I won't say anything more on the subject as I don't believe DX NEWS should be a place for political controversy but I wanted to set the record straight. The DX-Test from CFFB Frobisher sure looks interesting but unfortunately I don't think I'll be able to get home that weekend. I hope a lot of you manage to get this rare one.

RICHARD T. EDDIE - 152 West Rose - St. Louis, Missouri - 63119 Hi gang! I hope DX has been great. Not much DX since last Musing but here is what I've heard: Fri. 2/13- WMOB-L 40 Ala. on w/ET tunein 1:53 am to 2:15 tuneout - second try for a verie. KREX-1100 Col. v/first test program 50kw. day non-directional, 50kw. directional critical hours, 10kw. nights - heard w/50kw. ND and barely w/50kw. D. Three towers are used with 50kw., major lobes N & S. They expect to be on 1100 in two or three weeks. Thurs. 2/12- CKRM-980 Sask. 2:45am. KXEN-1010 ET 1:40-1:45 end of 50kw. test. Umn KPMC-1560 Cal. noted 1:50am. MM 2/10- KIRL-1460 Mo. ET/mx tunein 1:10 to 2:15. 2:15-2:28, TT, 2:28-3:10 mx except 2:15-2:28. Tues. 2/3- KXKN-1010 test 10kw. 1:16-1:18, 50kw 1:19-1:50. MM 2/2- Unn KFEK KGES KNX all noted. Fri. 1/30- WIL-1430 off for ET @ 1:05, still off 2:27. MM 1/26- KAWL-1370 Neb. TEST heard 1:03-1:35 tuneout. Veries in from WNXT-1260-TEST, WDIM-960 WISV-1360-TEST KHOS-940 WTAR-790 KGBS-1020 WPDC-600 v.1, WBAA-920-DX KAWL-1370-TEST all v/1. v/q- WDIM-960 WVAB-1550-TEST. So much for DX & veries. Totals now are 783/378, no change in states, 42/ 39. provinces 5/5 & countries 13/8. Don't forget to try for KREX-1100. They want reports. I must be near 30 so good DX to all & 73s.

BILL ALISAUSKAS Jr. - 7 Avenue B - Haledon, New Jersey - 07508 Howdy! Time for another entry from this spot. Loggings now up to 990; only ten more. First a question. About a week ago while listening to WAN, they ran one of those emergency broadcast system alerts where they cut the station @ 8:30am & when they went off, a Mutual station was there. Following the Mutual ID, on came "Now, more music and ----" on came WHN w/TT again. Only thing I can figure is WLYC in Williamsport Pa. which gets into Milford very well @ SSS. Only other ones would be one in Everett Pa. & one in Ky. Judging by the hour, I'd say WLYC. Any help? To DX: 2/4- I finally IDed the other 1140-er as WBZY @ 6pm, then 2/10, WREO-970 @ 5:57pm right through local WJRZ (ten miles) also WYER-1500 was on past lipm for flood alert, an one else here 'em? In Pa-2/8 & added three newies: WBZY-1140 5:09-m, no WRVA, WIVK-850 6:10, local-like, & then long-sought WTIX-690 u CBF 🛮 6:45pm. Also noted was usual WCAR-1130 way atop frequency w/rr, guess that fills WJBK's gap. Strike (two weeks) still on at Eastern w/no settlement near. I now work for Union Screw Machine in Totowa Boro. Das ict alles, drei & siebzig.

DEADLINE FOR MUSINGS IN BROOKLYN IS EVERY MONDAY. LET'S HEAR FROM MORE OF YOU!

LIST OF STANDARD ABBREVIATIONS USED IN THE PAGES OF DX NEWS

The TEXAS STATE NETWORK is claimed to be the largest regional radio news network in the United States. The news originates in the studios of KFJZ and KWXI-FM in Fort Worth, Texas. Their musical call sign is very distinctive and can be a useful recognition feature when DX'ing for these stations. Below is a complete list of the stations broadcasting T-S-N News as of February 14, 1970. First news of the day is at 0700, the last T-S-N News is terminated at 0000.

560	KLVI		1280	KWHI	1440	KETX
6 00	KERB		1280	KLUE	1450	KBEN
690	KPET		1280	KVWG	1450	KMHT
730	KKDA		1290	KWGH	1450	KNET
800	KDDD		1320	KVMC	1450	KSNY
860	KFST		1330			KLLL
860	KPAN		1330	KINE		KWRD
900	KALT		1330		1490	KBST
900	KCLW		1340	KWKC	1490	KNEL
910	KRRV		1340	KTSL	1490	KSAM
920	KBZB		1340			KVOZ
930	KDET		1340	KRBA		KZZN
960	KIMP		1360			KPLT
970	KBSN		1370	KOKE	1490	KDOK
1010	KDJW		1380	KBWD		KCTX
1050	KLEN		1400	KRUN	1510	KMOO
1070	KOPY		1400	KGVL		KSTV
1130	KBGH		1400	KEBE		KGTN
1140	KORC			KIUN	1530	KNBO
1150	WTAW		1400			KCOM
	KBER		1400		1550	KWBC
	KDLK		1400		1560	KHBR
	KEEE		1400			KTER
	KGRO		1410		1580	KBGO
	KSST		1410		1590	KGAS
		(Okla.)			1590	KERC
	KXOX		1420		1590	KBUS
	KIKZ			KGNB		KBBB
	KWFR		1430	KSTB	1600	KYAL
	KTUE		1440			
1270	KFJZ	(see note)	1440	KDNT		

Note: KFJZ uses only part of the T-S-N musical signature and identifies as "KFJZ News".

IN VERIE SIGNER LIST

A - Announcer	0 - 0
ACE - Asst. Chief Engineer	Op -
AcCE - Acting Chief Engineer	P - 1
AE - Assistant Engineer	PD -
AM - Assistant Manager	PDe ·
AR - Audience Relations	PM -
CA - Chief Announcer	PR -
CE - Chief Engineer	PrM
CM - Commercial Manager	ProM
CoC - Co-owner	RE -
COp - Chief Operator	RM -
D - Director	RT -
DJ - Disc Jockey	S -
DoE - Director of Engineering	S/ -
DPR - Dir. Public Relations	SM -
E - Engineer	Su -
EiC - Engineer in Charge	StA
ESu - Engineering Supervisor	StE
G - Gerente (Spanish for Manager)	StfE
GM - General Manager	StS
ID - Information Department	TD -
L - Licensee	TM -
M - Manager	Trf
MD - Managing Director	TS -
MusD - Music Director	VP -
NxD - News Director	VPE
NE - Night Engineer	XE -

Owner Operator President Program Director - Program Department Program Manager Public Relations - Production Manager - Promotion Manager Radio Engineer Radio Manager Radio Technician Secretary - Fecretary to Station Manager Supervisor - Staff Announcer - Studio Engineer E - Staff Engineer - Studio Superintendent Technical Director Traffic Manager - Traffic - Technical Supervisor - Vice President - Vice President Engineering - Transmitter Engineer

8

STATIONS NAMES AND ORGANIZATIONS

ABC - American Broadcasting Company -- or Australian Broadcasting Commission BBC - British Broadcasting SABC - South African Corporation Broadcasting Corp. CBC - Canadian Broadcasting CARACOL - Cadena Radial Corporation Colombiana CJKT - Central Peoples Bcg. Station RCN - Radio Cadena Nacional (Red China) Mexico or Colombia) DDR - Deutsche Demokratisher Rundfunk VOA - Voice of America (East Germany) TODELAR - Circuito TODELAR NHK - Nippon Hoso Kyokai (Japanese de Radio (Colombia) Bcg Co.) AFN - Armed Forces Network AFRTS - Armed Forces Radio & L.V. - La Voz de Television Service R. - Radio ORTF - Office of Radiodiffusion RPM - Radio Programmas de Television Francaise Mexico RAI - Radio Televizione Italiano JBC - Jamaica Broadcasting RNE - Radio Nacional de Espana Corp. WIBS - Windward Island Broadcasting SRS - Stichting Radio Service Omroep Suriname TWR - Transworld Radio

MORE GENERAL ABBREVIATIONS

Abb - Abbreviation IS - Interval Signal
TVI - Television Interference DF - Direction Finding
// - Parallel Transmitter SEA - Southeast Asia
E2O - Predicted fade-out or fadein time, by computer Crygun - Oregon
GCP - Great Circle Path

TALT - Transatlantic Listening Test MF - Mechanical Filter
CX - Reception conditions SLC - Simultaneous Listening Contest

FDXC - Friendly DX Contest FET - Field Effect Transistor A_{fr} - Fredericksburg Geomagnetic Index

MwA - Midwinter Anomaly

B.P.C. -

Boston Publishing Committee

Medium-Wave Signal Paths, Part II:

THE BASIC SEASONAL PATTERN

By Gordon Nelson

During the past six years the author has systematically monitored the Transatlantic medium-wave channels using sophisticated special equipment and techniques in an attempt to determine the factors which control unusual long distance MW reception. In this article we shall examine a number of the more prominent patterns in MW TA reception and discuss the physical processes responsible; moreover we shall also introduce a significant ionospheric phenomenon not previously implicated in MW DX - the Midwinter Anomaly.

Certain patterns in TA reception are obvious to the most casual observer and have long been recognized by MW DX'ers. Signals from Transatlantic MW stations are much weaker in the summer than during the winter months so much so, in fact, that many DX'ers stop listening during the midsummer period. During the winter there is considerable variation in TA signal quality from night to night, particularly from stations located fairly deep into Europe. This daily variation in TA signal quality is conspicuously nonrandom, however as regular monitoring of the band for a period of several weeks will show. Instead of being randomly scattered throughout the winter, nights of either very good or very poor reception tend to "bunch" together into "runs" lasting a number of days. Runs of good reception are often separated by runs of poor conditions (or vice versa, depending upon how one wishes to look at it); this naturally means that there is a significantly greater chance of one good night following another than if the distribution were truly random. Both of these patterns - the long term seasonal variation and the short term variability - are largely the result of absorption processes in the ionosphere. Before we can discuss the Midwinter Anomaly it will be necessary to describe these "normal" types of MW absorption in greater detail.

THE BASIC SEASONAL PATTERN

There is a marked degradation of Transatlantic MW signal levels during the summer months which is a consequence of the seasonal variation in the length of the sunlit portion of the day in higher latitudes. But this is not the only reason why few TA's seem to be audible during the summer period - there is also a purely illusory effect involved and it is important to bear it in mind when discussing seasonal patterns. The problem comes about because the majority of African and European stations go off the air around local midnight and sign back on after 5 or 6 hours. Dawn comes at such an early hour during the summer in high latitudes that many of the commoner TA stations have not vet signed back on before sunrise hits in that part of the world. As a result there is so much daylight along the signal path by sign on time that the station is inaudible in North America. For example, Cairo's winter sign on time of 2300 EST (which in midwinter is a good 45 minutes before dawn) would be more than an hour after local sunrise there during midsummer. Therefore there a are quite a number of TA stations not heard during the summer months simply because of unfavorable scheduling; many more TA's would be audible yeararound if it weren't for this type of schedule problem. Most of the all-night TA broadcasters are audible here throughout the summer although with reduced signal strengths for the reason to be discussed next. Consult references

F

5 and 6 for a series of maps showing the seasonal variation in sunrise time for TA signal paths.

The second factor contributing to the scarcity of summertime TA receptions is a real ionospheric effect and hashothing to do with the scheduling of the station's operating hours. This is a true ionospheric absorption effect and it brings us to the topic of solar radiation, ionization, and medium wave signal absorption. When the direct rays of the sun fall on the gases in the upper regions of the atmosphere, the energetic ultraviolet and X-ray components remove electrons from the gas molecules, producing a mixture of free electrons and positively-charged gas molecules. A gas like this is said to be ionized. The more intense the sunlight the greater the number of electrons that are stripped away; likewise the longer the direct rays of the sun illuminate the gas the greater the fraction of ionized molecules becomes. The free electrons and positively charged gas molecules are moving at high speeds and it is peractly possible for a free electron to collide with a positive gas molecule and become captured, thus producing a neutral gas molecule once again. This process of free electrons becoming reattached is called recombination and it is the main way in which ionization gradually disappears.





Sunlight causes electrons to be stripped from gas molecules and these free electrons absorb MW.



At night the free electrons recombine with the gas and the amount of MW signal absorption falls off rapidly.

When the ionosphere is in daylight both ionization and recombination are taking place simultaneously; because electrons are removed at a much greater rate in the daytime than they can recombine, however, the number of free electrons in the ionosphere quickly rises to a very high value after sunrise. Come sunset, however, and there is no longer any sunlight 'o remove new electrons; in the absence of any new ionization, recombination takes over and the number of free electrons begins to fall off rapidly. As long as this part of the ionosphere remains in darkness the number of free electrons will continue to drop until essentially all of the electrons have been recombined.

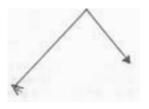
It is the presence of these free electrons in the lower regions of the ionosphere (above, say, 20 miles) that is of concern to the MW DX'er for they produce a very strong absorption of MW signals. When a MW signal passes through an ionized gas of this sort the energy of the radio wave is converted into heat in the ionosphere; the greater the number of electrons free in the gas

the more efficiently the signal is absorbed. In the middle of the day, when the concentration of free electrons is at its highest value of the day, MW signal absorption in the lower ionosphere is so great that little if any of the skywave signal gets through. As a result MW propagation during the midday hours is almost entirely by means of the groundwave; there is no long distance skywave "skip" signal to speak of under normal conditions. (On some days during midwinter in temperate latitudes the electron concentration may be low enough during midday to permit some skywave signal to get through; this is the origin of the rare long distance daytime MW reception noted during some winters - stations in the 1500 mile range are sometimes reported.)

This daylight-induced absorption naturally reaches its peak around noon in any particular location when the sun is at its highest position in the sky and the number of free electrons is at its highest value. By the same token the total absorption at a particular time of day depends upon the seasonal position of the sun in the sky: it is highest in the middle of summer and lowest in midwinter. The equations describing the production of this daylight absorption are well defined and it is possible to calculate in advance the amount of ionization absorption produced under any particular set of conditions. These equations relating the position of the sun in the sky (and sunspot number) to the amount of resulting MW absorption on a particular frequency form the basis of our "E20" computer calculation of dawn-induced fade out times for various MW stations. "



The skywave signal is absorbed in the lower part of the ionosphere in the middle of the day by the free electrons there.



At night the absorbing layer dies away through recombination and skywaves reflected from the F layer become audible at great distances from the station.

As the sun drops in the sky and sunset approaches, the rate of recombination begins to become significant and the electron concentation and resulting absorption begins to drop. Around the time of sunset (note that the time of sunrise or sunset at a point say 50 miles above the surface of the Earth is different than on the ground below; hence the terms ionospheric sunrise and ionospheric sunset) the amount of absorption falls off quite rapidly - hence the rapid transition from daytime to nightime reception conditions. How long after sunset until all of the absorption vanishes through recombination? This naturally depends upon how many electrons were set free during the day - the higher the level of absorption during the day the longer it will take for recombination to eliminate the absorption during the evening hours.

During the winter months the amount of absorption produced during the daylight hours is relatively small as we have seen. With a low electron concentration to begin, recombination will reduce the absorption to a very small value by midevening. For our purposes it can be considered that essentially all of the daylight-induced absorption will have disappeared through recombination before midnight during winter months. This is because of the initial low value and the early sunset hour during this season. Thus TA signals are essentially free of left-over daytime absorption during the winter months and signal strengths can be very high.

During the summer months just the reverse is true. The many long hours of daylight and the high position of the sun in the sky results in a very high concentration of free electrons during the day; the amount of MW signal absorption is therefore extremely high during the summer months. (Long distance midday skip of the sort mentioned earlier is never experienced in the summer months because of the high electron concentrations then.) When the short summer night does finally begin there are a great many free electrons which must recombine before the absorption drops to a low value - and there is not enough time during the short summer evening for all of the electrons to recombine. Thus there is a significant residual daytime absorption remaining during the evening hours in the summer and this noticeably weakens the signals from TA stations consistently. (We are only concerned with the residual ionization remaining during the earlier evening hours during midsummer; while the absorption may reach rather low levels just before local dawn - thus permitting Deep South Americans to be heard for example - the TA DX'er is restricted to the evening hours because of the early time of sunrise at the transmitter end of the signal path.)

This then is the fundamental basis for the general seasonal pattern in TA MW signal strengths - residual daytime absorption. Probably the most important thing about this type of solar-induced absorption is its complete predictability. Given the composition and distribution of the gases of the upper atmosphere (known through rocket and balloon studies) and the kind and amount of radiation in solar illumination (which varies in a known way with sunspot number and season), it is possible to compute the amount of MW absorption produced during the day and to predict when it will have fallen to a particular value as the result of recombination. This type of absorption is well understood in terms of statistical and quantum mechanics and the predicted values agree very well with measured values. 9 On the basis of this effect we would then expect this type of absorption to be strongest at midsummer, become progressively less important during the fall, and reach a minimum value on the shortest day of the year (December 21st - the winter solstice); residual absorption should then begin to rise again until it reaches its maximum again the next midsummer. Much scientific data has been accumulated by means of a nymber of independent techniques (both direct and indirect) to conclusively show that this basic seasonal pattern in residual absorption does in fact exist although, as we shall see, a number of other kinds of absorption may also be present at the same time.

In Part III next week we will discuss the influence of auroral disturbances on TA signal patterns and explain the Midwinter Anomaly in as much detail as is now known...



INTERNATIONAL DX Digest



Propagation & Features Gordon Nelson, 19 Irma Ave. Watertown, Mass. 02172

INTERNATIONAL WATERS (HOLLAND). Radio Nordsee International first tested on January 24th; planned schedule is German 0000-0400, Various languages 0400-1100, English and German 1100-1900. Announced frequency of 1605 and requested reports to Radio Nordsee International, P.O. Box 113, 8047, Zurich, Switzerland. (Ken Brownless, England) This one is now operating from a location very near to that of Radio Veronica. (SCDX) The actual frequency is 1610 kHz, of course; heard on this channel MM 2/23 by Stan Morss in Massachusetts testing with no announcements whatsoever. (Ed)

ENGLAND. Per questions raised last week in DX News regarding the location of Stagshaw BBC on 1151, the transmitter is located at 2°1' W, 55°2' N. This is 10 miles due West of Newcastle-Upon-Tyne and is well within England; the Scottish border (boundary?) is about 27 miles as the English Sparrow flies... This is one of those places that isn't shown on any map or in any Atlas that I've ever been able to locate. (Editor)

CANARY ISLANDS. The following information on the present MW situation in the Canaries comes from one of the editors of Arctic who's just returned from a vacation there:

- 620 RNE, Santa Cruz de Tenerife, 0245-1700; towers situated at Los Campitos, 2200' high. Horizon blocked to the West.
- 894 Radio Juventud de Canarias, 0310-2000, towers at Taco, elevation 1900'. Horizon blocked to the West.
- 1133 Radio Popular de Tenerife is a new 20 kw station using very modern equipment; towers located at La Laguna, elevation 2500'. Horizon is free in all directions.
- 1385 La Voz de la Isla de La Palma, Santa Cruz de La Palma, La Palma Island; heard with very weak signals and totally knocked off the channel by Radio Centro, Madrid, in the evenings. This station must be very low powered or using very poor equipment.
- 1412 Radio Club Tenerife, Santa Cruz, 0300-2000, has towers about 2000' above sea level but horizon is blocked to the West.
- 1502 Radio Popular de Guimar, Guimar, is on the southeast coast of .

 Tenerife; very weak and suffered QRM from European stations.

 Only the first two of these stations have ever been heard in North America; I suspect that is due in large part to the blocked horizons there. (Editor)

CEYLON. The Celon Broadcasting Corporation is testing on 640 from Maho; any chance for this one Glenn? (ARC)

TURKEY. There is a new station operating on 1500 with the slogan Egitim Radyoso Zenguldak according to a correspondent in that country; no further information available. (ARC)

SHARJA (TRUCIAL AMIRATE). The current schedule as announced by "The Voice of the Coast from the Trucial Amirates" is 2200-0000 and 0700-1200 on 737. (Editor)

MEDIUM WAVE STATIONS IN PORT-AU-PRINCE, HAITI

*César Obiío

In a trip to this capital during the end of January, the following stations were heard operating in this city:

- 660 R. Lumiere, 4VUE, "Reseau Culturel Haitien", Boite Postal 1051.
- 860 R. Progres, 4VDS, (MOVE FROM 1210), Boulevard Jean Jacques Dessalines 785.
- 990 R. Cacique, 4VCPS, "La Reine des Stations", Rue Traversiere 3.
- 1080 La Voix de la Revolution Duvalieriste, 4VB, Boite Postal 1143.
- 1150 R. Caraibes, 4VAB, 23 Ruelle Chavannes.
- 1250 R. Diffusion Haitienne, 4VYM, Ruelle Jeanty, Bois-Verna.
- 1320 R. Haiti, 4VW, "La Vedette des Stations, la Station des Vedettes", B.P. 737.
- 1380 R. Port-au-Prince, 4VS, Stade Sylvio Cator.
- 1430 Magloire Broadcasting Circuit, 4VGM, Rue Americaine.
- 1500 R. Selecte, 4VOC, Boulevard Jean Jacques Dessalines, Rue Saint-Honore 538.

As can be seen, some stations use slogans after the names - call letters are not always mentioned. These loggings were made with a transistor radio and the frequencies are not exact; the values from WRTVH have been used. At 1400 EST most stations relay a government program originating on 1080. 4VE on 830 could not be heard in Port-au-Prince but was heard weakly about 10 miles west of the city. The following stations are listed in WRTVH but were not heard:

- 880 R. Nationale, 4V2A
- 960 R. Carillon, 4VCD
- 1120 R. Union, 4VF
- 1170 R. Tropiques, 4VRD

-30-

(In past seasons some of these stations have consistently operated on split frequencies and although the exact present channels are not known, it may pay to watch on the following channels: 995V for 4VCPS, 1146 for 4VAB, 1325 for 4VW, and 1385 for 4VS. Editor)

UKRAINE. Uzgorod, nominally on 890, is actually now being heard on 893; since this is located very far to the West, almost to the Polish border, it's definitely worth watching for on a good TA night. (Editor)

QATAR. Present schedule for Radio Doha on 674 is 2200-0100 (Fridays until 0245) and 0800-1400. (SCDX)

PHILIPPINES. According to a recent QSL, Radio Veritas on 860 is now operating with 100 kw. (ARC)

SAO TOME. Emissora Nacional has recently begun operation of a new 1 kw relay on MW; soon to be boosted to 10 kw. Freq unknown. (ARC)

ROUMANIA. Radio Bucharest has changed its Foreign Service MW channel from 755 to 629. (ARC) This means you can run across just about any European language on 629 so watch it... (Editor)

PROJECTED OPERATIONS



ZAMBIA. Radio Lusaka on 818 is presently operating with only 2 kw but will be using one of thennew Red Chinese 240 kw transmitters on this channel later in the year. (Editor)

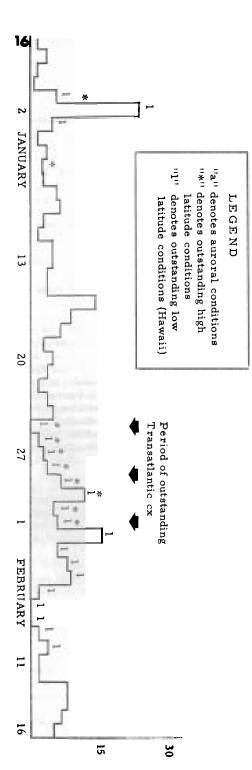
SUDAN. Radio Omdurman is planning to operate on 1295 with 100 kw later in the year. (Editor)

GREECE. The VOA's new 500 kw MW relay station is supposed to begin operations on March 1st from near Thessaloniki; frequency unknown but may use the current channel of 791. (SCDX)

BONAIRE. PJB Lovers, take heart. The present 500 kw installation is to be boosted to a full 2,000 kw (That's two million watts...) and 4 additional antennas are to be erected. This will be the most powerful MW station in the free world. (ARC)

HAITI. A new commercial station is to begin operation in the near future in Port-au-Prince; will operate on MW in French, Creole, Spanish, German, and English. This station will be financed locally. (César Objío)

MONACO. Within 2 months Radio Monte Carlo will begin an additional commercial program on 1466 from 1800-2100. This program will be in Englsih and will feature progressive rock and classical music; it will be recorded in London under the name "Geronimo" and sent to Monte Carlo for airing. More details in a future issue. (Ian Anderson, London) of JETHER THAT!



DX CONDITIONS IN THE DOMINICAN REPUBLIC DURING THE OUTSTANDING TA PERIOD 1/25-1/28 *César Obifo

- 1/25 Good conditions on the higher side of the band were noted from Europe. First strong station heard was Neumunster-1268 at 0010 with a very good and readable signal. (It was on this date that I had new tubes put in the RF and rectifier stages of my receiver and I don't know if conditions a seemed better because of this - see Monitor Reports)
- 1/26 This evening I started from 1600 kHz and worked down; I very easily heard with strong signals WDR-1586 with IS at 2355, CKLM-1570, next came Beromunster-1562, Nice-1554, and finally Warsaw-1502 with the best reception for such a long distance logging - it was as if I were listening to a Venezuelan station. General conditions all around the Caribbean and Central American area were also good but his opening to Europe was excellent,
- 1/27 Conditions this evening were good but different, and Rome II could be heard very well on 845, steady and strong signal especially from 2100 to 2200; around 2130 Cairo on 773 was heard but was rather weak. But these TA's were only audible in the lower frequencies of the band; weak carriers were noted on other Europe frequencies but no audio. Albania on 1214. Monaco on 1466, and other stations in the high end of the band were not audible - not even the ones heard the day before. At the same time, and till 2330 U.S. stations were stronger than ever, for instance, WFAA-820 and WRVA-1140 as well as other stations usually not heard until very late when many L.A.'s sign off; this was a rare logging of WFAA-820 because that channel is usually covered by HJED but here South American stations were very weak: WFAA was dominant, Maracaibe-980, Sutatenza-960, Caracas-770, Rumbos-670, Radio Antilles-930 were also unusually weak; usually they are very strong and even here heard on transistor radios but not this time. A curious example was listening to Radio Santa Maria, HIDV-1200, so strong as a local station here, a frequency usually covered by R. Tiempo-1200 in This station is north of the Dominican Republic but other stations from the norlt ern part of the Republic were not heard at all, perhaps because this antenns is higher in this area as it is located on the top of a mountain in the town of Santo Cerro.
- 1/28 This evening conditions returned to normal and despite all efforts no long distance reception was heard. -30 -

PRESSTIME FLASH ...

produced by one of these upper atmosphere as the

graph shows

magnetic

field.

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d. High values of Afr occur during a hear,
d. Af certain types of solar disturbances.

Light latitudes and pers

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of electrically charged particles

The medium-wave

blanketing over North America

and Europe; on such a night

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Values

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Long periods of low geomagnetic/auroral activity are necessary but not sufficient to guarantee

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#

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about 40) are

in high latitudes and persists for some days

effectively mask excellent high latitude

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effects such as the

"Midwinter

Anomaly" may

TA and TP reception

Our wayward mech nical filter order has finally been located by the Air Freight people and the filte s will be mailed out to those who have ordered them in a couple of days afte we have checked each one to make certain it is operating properly. Your stience is appreciated ... GPN

Mambers' Loggings: Bob Foxworth, GPO Box 2011 New York, N.Y. IDODI



Huceptions.

- 515 Algeria. Oran I quite good on 3/1 from OL2O to 0140. Arabic mx played on what sounded like a banjo. ID and news by a woman in Arabic 0130. Signal perfectly readable, 30 over s-9 the entire time. (Merriman, Va.)
- 956 Ireland. Athlor: logged with fair signals from 0215 to 0235 on 2/12. Played some pop as the mostly folk ballads; such slop from 570. Noted quite a strong EAR, From Berlin? On on low part of the band second excaptionally good this evening, Country 55. (Big Geo Kelley, Back Bay, Mass)
- 580 Puerto Mico. WKAQ atop channel 0330 2/16, singing IDe. (Edwards, N.J.) 5.0 Capary Islands. NNE Santa Crus de Tenerife. Hrd with fantastic signal
 - and perfect 1D at 0200 2/12 dominant over domestics on this even-freq TA channel. (Kelley, Mass.)
- C47 England. Dayentry fair with some static 0224 2/9 with cl mx and anote in English. (waldron, H.J.)
- Haveit, KORL again with 5 minutes of news at 0300 on 2/9. WBM carrier case on before I could got definite ID, tho. Unneeded KORL used to break for news at 5 before the hour, i.e. at :55, so them was an outside chance it was the Alaskan but I suppose it was Hawaii. (Dingerfield, Pa.) (Was that during their rock days? It's a big thing for rock-format stns to go to news at :55 but more staid stations go to news at :00. REW?? -Ed.)
- Portugal. Lisbon I in very well 2250 2/10 and again 2312 2/12 with a variety of mx and talk with male and female anners; signals up to s-9 at times. Most regularly heard TA here. (Carber, Neb.)
- France. Marseille hrd, altho not too well, on 2/1 and 2/11 between 1730 and 1800, mixed with an unID. (Dangerfield, Penna. nr Phila.)
- Spain. RNE Sevilla Lrd from 2200-2230 and 2300-2315 2/12 with Spanish mx and talk plus several RNE IDs; signal very strong and nearly the strength o of 630 at times. Then this stn is in well, I try for a signal on 737, however, that channel still just a het, so far, here [Garber, Neb.]
- The Venezuela. YVNC Radio Maracaibo on late on 2/11 and ard to 0148 s/off. They were on late for come kind of ficeta, pun was sponsored by Coca-Cola. (Merrinan, Fairfax, Va.)
- * 780 Dr. Virgin Is. EBVI hrd on an 27 at 0217 on 1/26. (Osterman, MY ar Bflo)
- * 644 St. Lucia. Contries believed to be the one in strong English with Caribbean news at 2000 after pgn of light mx which had theme of "Love is Blue" and TCs in AET. Must be up 4 kHz from 840. (Osterman, NY) (datey)
- SA's Gilbert and Ellice Islands. Tarses undoubtedly the one from 0235 to 0250 NM 2/9 with English lessons. Female anner would repeat a sentence in KE several times and a man would repeat it (I think in local lang). Also was noted after 0330 with rock Signal strong at times but audio weak and hard to understand. No ID but don't see how III could be anything else (Garber, Nebraska)
 - @Tarawa continues to be heard almost every morning I look for them. Mostly just a weak carrier but did et some audio on 2/12 and 2/13 around 0400. (Merriman, Va.)
 - @Tarawa was logged here on We . 2/4 at various time between 0234 and 0332 The signal faded in about ev ry 5 minutes and each time was clearly readable for about I mirate. I picked up talking, patches of music with and vitbout vouels, gongs, and a mention of Tarawa just after the gongs. I have had simals on other mornings, but the 2/4 reception is the only one worth reporting so far. I would like to get more detail. (Dangerfield, Pa.)
- 85 Armenian SSS. Radio Yerevan signal here on 2/3 at 2220, on a good East Europe night, cluing to watch for good Pacific on the next AM, as did happen, as above. (Bungerfield, Pa.)

- 885 Monteerrat. Has this one had a power increase? Sounds like more than 350 watts. (Wood, Havall) (Richard, neet Ben; next) Montserrat. To set the record straight, I think it should be noted that Madic Montserrat is listed in the new MANY as 1 kw and not the 250 watte that has been reported. (Dangerfield, Pa.)
- Colombia. BJOS over all also 0216-0231 2/15 over all else. (Edmands, H.J. 900 Puerto Rico. WPEA good, strong signal 0501 with "La Borinqueña" and SSB at 0402, them s/on anet in SS, then same in NE, finally a good-ux pgs. Ard 2/9. (anleron, near, but not IN, fort Homsouth, N.J.) hi hi
- 1010 Mexico. ASHL, Badio Intermedical, Gasdelajura, Jal. Bunning AW nightly e.g. noted 0430 2/14 and very good with Mexican mx. (Jood, Kailua, Havait)
- 1090 Hawaii. Her owner of REAI facilities is saint previous owner for delays in getting the station on the air; is now expected "within a few weeks". (sood, Macaii) (Can't cait to begin losing money, maybe? heen't domolulu enough stations already, hi. Let us know what bappens with them ..-Ed.)
- 1997 Spain. A/El) In You do Wadrid had many evenings, Jaty on 2/10 to 2203 a/off with pop set and opera, very good on MK 3/18 around 0230, 2 clear Ise had by YL. (Marriann, Va.)
- Croch'. Bratislava in with a good signal on 2/11 at 2308. Signals from Canchoslovskin have been leproving lately. (Dangerfield, Pa.)
- Cuba. Caban here, usual not progratho didn't get which one, 0030 2/10 RJE) Yumoslavia/Spain. An interesting Freg. Eagreb was just tremendous at 245 on 2/11. However at 1815 most evenings lately at least 2 Spanish stations have been on toy. They must be staying on later than the 1800
- s/cifs listed in ARIVE. (Danger teld, Pa.) Colombia. EJCT in well, on high side, 0050 2/16. (Edminds, N.J.)
- 1196 %. Groweny. Vol Manich noted well in Eng 0139 2/9. (Octorian, N.Y.) 1:05 Sierre Leone. Prestoen in fair over Bordesux for a few minutes 0144 to 0147 Mi 2/9 with a BBC commentary about smallpox and vaccinations in West Africa. Was brd later, in some native tongue 0201 to 0307 with fadeout occuring a few minutes later. Africa #2 hers. (Garber, Neb.)
 - Efrectown logged well o/s Bordesax at 0155 on 2/9 in African disloct, at 0200 time pips and into news. (Melley, Mass.)
- 1268 Yougoslavis/ W. Jermany. Bovi Sad was the dominant one at 2250 on 2/11 after Neuminster had been on top most of the evening. (Dangerfield, Pa.) unID TA. Erd at 1745 on 2/11 and most likely Leipzig. Signal disap-
- peared shortly thereafter. (Dangerfield, Pa.) Colombia. Radio Reloj, Cartagena. 2/12 0330 clear ID as "Radio Reloj, emisora Caracol en Cartagena". (Wood, Hawaii)
- 1003 Ouines, Hep. Commakry noted quite good 2/12 0140, peaked at 0210. Was all
- in FF. (Wood, Havnii) (note Seo Kelley's remarks about 2/12, 566 item-Ed.) 1421 W. Germany. Searbricken very good on 2/1, 0150 to 0205 and peaking at s-8 and easily separated from 1420. Quiet instrumental mx to 0200 and news by a man after that. (Merriman, Va.)
- 1502 Poland. Warsay excellent at 2142 on 2/11. (Dangerfield, Pa.)
- 1546 Malta. BBC Delimara Point best ever heard on 2/15 2/16 with man in Arabic at 2313, music after 2315, Vinnitsa on at 2330 and overed Malta, both audible later around 0030 fading in and out of each other. Definite Arabic language. Reported by Tape. (Merriman, Va.)
- 1546 Ukrainian SSR. Vinnites fair on 2/3 at 0030 but was badly cut up by static on this date. Very good on 2/18 at 2330 and until 0030; got a good IS at 0000 followed by a man in Russian. Was mixed with Halta later. As trying a taped report to Moscov as had no reply to report sent to Vinnitsa. (Merrinan, Va.) (as is 1550 item, next)
- 1550 Colombia. MJAX La Voz Porteña was on AN a/11 for a Piesta pgm, sponsored by Cocs-Cola and wond r if this was the same Fiesta that YVNC was on for?
- 1562 Switzerland. Berondinster was poverful at s/on on 2/1 at 0100. Clear ID as: "hier ist das Schweizer Andio" at s/on by a YL. IS noted 0057. (more) (Merrinan, Va.)

1594 Portugal. CSBb Lisboa apparently s/on now at 0000 and hrd with excellent signals many mornings. Mostly talk by a man and woman and occasional music. (Merriman, Va.)

-- Radio Nordsee International --

- ** 1610 International maters. R. Mordsee International logged and taped here from 1850 to 1910 on 2/11. (Yours is earliest-dated reception, so far-Ed.) Definite ID on tape, along with annet of free as 1610 kc, and not the 1605 reported in 1/3 DX News. Lang sounded like German but could easily be Dutch as indicated in DX News. (They sound very similar-Ed.) They have an IS of h notes, repeated 3 times, sounding similar to the latter "V" repeated 5 times in code altho the last note is not long enuf to be a true dash. They gave 3 IDs, at 1855, 1902 and 1909, then faded into the noise around 1912. (John Shannon, Penna.)
 - @BUTinitely a stn here, freq seemed nearer 1608 kc, playing pop mx and hrd on 2/13 at 1539, unreadable and 1400 and back to mx 1401: Georgy Sirl, etc., mostly segues. Taped a couple of times but no definite lang andte, signal comparable to B.R.-1602 at times but noise level bothered. Likely R. Nordsee Int, will be looking for ofm by others. (Hauser, in Korat Thailand.) (Good Guess, hi. Incidentally, will run ur rpt next week)
 - @R.N.Int. hrd for first time on 2/17 0131 to 0215 f/out. Current rock mx, ancts every 15 minutes or so, in several langs incl. Eng., German and Dutch. Using slogen, Voice of Europe and asking for reports to Box 113, 8047 Zdrich, Switzerland. Announced as Test transmissions. Has not been hrd in the evening so far, but was good also on 2/18 around 0100. This should be widely hrd on this clear channel. (Merriman, Va.)
 - @Radio Mordsee International now on the air with tests. Hrd for the first time 2/12 at 1516 s/on after a TT. Their SW xmtr went off when BCB tx came on. Power isn't enough, apparently, to run both xmtrs at same time. I would guess at least 50 kw on MW. Strong and clear, ID very often and continuous mx. Noted strong on SW free 6210 all day and night but often breaks. Incidentally Paul Kilroy's unid on 1562 2/7 is definitely Radio Veronica, they are using "international" very often in their pgmg to Dutch citizens in other countries. (Sorry, out of sequence-Ed.) (Bengt Ericson, Växjö, Sweden)
 - ②Noted R.N.Int. on approx 1610 with uninterrupted mx, a good signal on a fair to good TA morning, around 0100 to 0300 fade and played many old standards. Faded along with the other TA's. (Stan Morss, Moto-Ski, Mass)
 ②ARC rptr G.M. noted them 2/9 at approx 1530 on Sw freq anncg imminent activation on MM freq, gave as "1605" kc. (mv-Eko 2/15/70)

-- Verification section --

- 755 Portugal. Standard v/q for taped report in 1 month-mint stamps. (Osterman, N.Y.) (you sent them the stamps, I take it -Ed.)
- 1050 Mexico. XED, La Voz de Baja Cfa., Mexicali, B.C. V/l and postcards from Armando Aguirre L., Gerente General. First report from Hawaii but has had some from Australia.
- 1203 Costa Rica. TIQ sent card and pennant, unreadable v/s. (Osterman, NY)
- 1268 W. Germany. Black card with map of W. Germany just in verifying reception of Neumanster 10/22/69. V/s unreadable, seems a little like "Hinds" and is European #97 here. (Hilding Gustafson, Rockford, Ill.)(Welcome to IDXD, good to hear from you -Ed.)
- Ryukyu Is. KSBU, Okinawa Far East B/C Co. verie folder, all details.

 Xmtr is located in Northern Okinawa, about 65 miles north of Naha. Antenna is a 4-tower vertical array beamed to Shanghai. Is interested in reports. V/s Warren L. Beals, CE. (Wood, Hawaii) (Mr. Beals gave your Ed. a most complete tour of DZAS and SW xmtrs in Manila in Dec. 1964; he was very DX-conscious, good to know he's still polishing tubes -Ed.)

- 1375 St. Pierre et Miquelon. Sent v/f in French for tentative reception of 11/19/69. I had received a letter from G. Duclos, Chief de 1'ORTF but it was rather vague and he requested "anymore available information" so I sent a letter giving every detail of the reception I could, which netted me the reply. Signer is not readable, but was someone other than M. Duclos. My best from No Amer and Ctry #17.(Garber.Nebr.)
- 1380 Mexico. XECO-1380 sent same v/q as Cliff Reno got from XEOY. Answered my report from May 1969, specifically verified date, time, freq, calls and portable xmtr site. (Waldron, N.J.) (Portable what?? -Ed.)
- 1394 Albania. Registered letter from Tirana verifying my reception of Oct. 27, 1969 and makes European No. 96. V/s unreadable. (Gustafson, Ill.)
- 1505 Anguilla. Letter from Roy Dunlop on their DX for NNRC 12/22/69, same as everyone else reporting. They state they are a rare station?? I hear them fairly regularly in the early evenings. (They're rare only in the Greater NorthEast, NYC and Boston to be exact, hi-Ed.) Anyway, Country No. 91 for me. (Gustafson, Ill.)
- 1560 Dominican Republic. Nice friendly v/l in Spanish from Radio Maiba, HIJC, signed by Julio Caballero, Director-Proprietor. Was impressed by my tape. Enclosed some used postage stamps from the Dominican Rep., as I had done likewise with U.S. stamps. Last paragraph of the letter reads:

Agradecemos en todo lo que vale tan valiosa informacion y aprovechamos la oportunidad para solicitarle nos siga sintonizando, ya que proximante instrumentaremos un readjuste en nuestro transmisores y nos agradaria mucho saber como nos sigue escuchando en la misma frequencia." (Waldron, N.J.)

Well..unofficially, it looks like "We gratefully acknowledge (all of) what we regard as very valuable information and we would like to take this opportunity to ask you to continue listening to us, since we will soon be making a readjustment in our transmitting equipment and we would very much like to know how (well) you continue hearing us on the same frequency". -Ed.

Back of the File... Concentration for the past couple of weeks has been on U.S. reception here, as excellent cx in that direction continue. No doubt. European reception is excellent from your part of the world. That seems to be the correspondence: When ECNA gets Europe. Hawaii gets ECNA. (Richard Wood) ... Cx seem to have tapered off going into February with TA's not near as strong as they were. Most receptions have been on the high end of the band. Still getting very weak reception from Tarawa but not as well as they were hrd on 1/31. Only thing of interest is Nordsee-1610 and I suppose we'll get into a big argument about whether this is BCB or not; for my money, it is. (Same here, too -Ed.)(Alan Merriman) ... Some of the TAs recently have been at season's best levels. Nice DX cx continue here, and I don't mean just Nice, France! (Ben Dangerfield) ... Wish I had more but will have to get new loop booster amp built first. Still need some of the hard-to-get parts. The present unbalanced FET ruins the DF nulls when used in direct-coupled configuration. (Clarence Freeman. Cal. from last wk's report) ... Cx were superb last week of Jan and first of Feb. Seems I hear more than ever before and could be better cx, better receiver or more accurate info (tnx to IDXD) telling me where to listen. Maybe experience enters in, too...Seems our wandering Cubans are on the move again. Several unIDs suspected to be Cuban, i.e. on 1393.2 and 1399. MFs will certainly help, when order arrives. The R-390A has good selectivity to a point but the deep skirts are miserable, but it still is better than any other un-modified rowr I have ever used. (Jerry Conrad) ... CFFB-dx was Not Hrd by your Ed. in NYC. Had a trace of audio under Cuba, 40 db below, man speaking, unID tho. Perhaps a local spur/image. Let me know if you-all hear Chad on 3/7, hi. -73-

New VoA XRs for Philippines

22

Conditions in Erwall January 29 - February 10.

General: As I write this I am in the middle of a protracted period of North American reception of staggering excellence. Coast-to-coast reception is being experienced on all channels, including graveyards and regionals, and there is no guarantee that the station dominating the channel at any given moment will prove to be the farthest west, or the West Coaster which normally dominated. Croveyarders from east of the Missisippi have been a commonplace, with several from Fenna., Va., etc. It so happened that this period, certainly an all-time North American peak since my arrival in Hawaii, coincided with a series of frequency checks in the Kentucky/Virginia area, which were, consequently, easy loggings. But there has been no particular dominant area within North America, and Alaskans have - for the first time in my experience here - been heard at semi-local strengths, 2t or 30 db over S-9.

- 1/25: Mid-West dominating West Coast on many fq's, e.g., KOIL over kh.EN-1290.
- 1/26: An outstanding night; Conakry-1403 reportable, the best I have heard it, and one of the finest N.American nights in my experience. The WEND-1580 Pa. Test gave pretty solid copy for over half-an-hour, and a f/c from WFLN-900 Pa., 1 kW, provided strengths of up to S-9. Pacific generally fine, and Alaska very good(KJNP, KFAR, KICY). An Ill. graveyarder noted.
- 1/27: Another excellent N.A. night; another Ill. graveyarder, açain on f/c. Conakry in well, and traces of what beaming indicates might well be my second African, though not positively identified, Dakar, not on 764, but, significantly, on the h.f. frequency of 1538.
- 1/28: Mainland stations cutting locals to pieces, e.g., KSTN severely disturbing KCCN-1420, without looping.
- 1/29-30: Basically similar.
- 1/31: WBZ, KDKA etc. semi-local. Both Alaska and southerly areas equally good, e.g., WSB and KFCD both strong on 750. Cuba, West Indies above average, and also Pacific. Rarotonga-600 new. Asia very good, new Thai logging, etc.
- 2/1: Swing back up to the north again, or rather, loss of outstanding signal from Tahiti, northern S.America, mid-Pacific, etc. N.America continued excellent.
- 2/2: WCLS-1580 good, CKLW-800 dominating its channel, WABC, probably the best I have ever heard it, WNBC very good; Alaska very good(KICY, KJNP). Central and northern S. America fairly good.
- 2/3: In retrospect, I would say that the period of outstanding North American cxs began here; clear sign of this was KMOX giving KPNW a run for its money, and similar tendencies with KYW/CFCN, etc.
- 2/4: CKLW right over XELO, CHAB etc. KYW level or over CFCN; La. graveyarder on f-c.
- 2/5: KI.OX almost level KPNW; East Coast excellent; Alaska excellent, KCAM-790, long unheard, noted. Asia good.
- 2/6: CKX-1150 Man. dominating its channel, very unusual. KVOX-1280 Minn. and other loggings from the Man./Minn. area, an evident directional opening.
- 2/7: N.America now at its peak; ZBM-1 good all evening; WABC level and over KOB, the very first time ever so noted; WLW excellent; WHO almost level local KHVH. Four Kentucky noted on r/c, powers down to 250 watts(WKDO-1560, S-9). W.Va. f/c for new state; WRSJ-1560 F.R. and other West Indian signals good.
- 2/8: Another peak night; 3 more Ky., 2 new Ark., WTPS-1560 Mich. (FSA 500 w.), etc.
- 2/9: For the first time, Alaskans at truly semi-local strength: KICY and KJNP, plus KFAN, KFKD excellent. KFKD dominating CJVI. WTCC-129C Ga. dominating stns farther west on its channel. WHEC-146C N.Y., CKTS-90C Que. new. WAVE-970 good.
- 2/10: Still on peak. 2 new Va.(one CY), Pa. GY, WAAC-1300 Ind. 500 w., etc. WMEX-1510 Mass. up to S-9, over KSOM-1510 Cal. Richard E. Wood

Next month the Voice of America will complete installation of its new transmitters at Tinang in the Philippines, making the relay station the single largest transmitting plant the Voice of America has overseas.

The U.S. and Philippine governments reached agreement on a new high-power relay station at Tinang on May 6, 1963. But it was not until May 1969 that the first of 10 transmitters, each with a power of 250 kw, went on the air at Tinang. The last transmitter is due on the air in March. The project's cost was put at over 23 million dollars.

The 2,450 acre transmitter site is in Tarlac province, 10 miles northeast of Clark AFB. All of the quarter-megawatt transmitters at Tinang were built for the VoA by the Hughes Aircraft Co. in Culver City, Calif. They are not known as a supplier of broadcast transmitters, although they produce other types of advanced electronics equipment.

All the programming relayed by Tinang originates in Washington, or other studios in New York, Miami or Los Angeles, and are picked up at the VoA receiving site at Baguio, in the Philippines, and then are relayed to Tinang and to another transmitter site at Poro.

Programs are transmitted in 10 languages to target areas in East and South Asia, and the Pacific. Chinese-language programs still encounter extensive jamming, which has been a problem since 1956.

The VoA has another high-power relay under construction at Kavala, in northern Greece. Kavala relay will have 10 SW transmitters of 250 kw each with 22 diplexed curtain antennas for improved coverage of East Europe, the Middle East, Central USSR, South Asia and North Africa. The Kavala station will include a 150-kw medium-wave transmitter for improved coverage of the Balkans and the southern part of the Ukraine.

(excerpted from BROADCASTING, Feb. 16, 1970)



IDXD produces more new international MW station

information than any other source in the world !!

midnight to sunrise





EDITOR:		
r.j. edmunds Dax 946		
Wayne, n.i. 07470		

Okay, gang, we're trying several new things all at once, hi. Due to George Birthington's washday & other things, we won't

be able to do the column at work, and of course there's no mail Monday anyhoo, so the thing is being done at home on my newly-cleaned old crate, hi. Type size a bit bigger, but... mikewise, I fergot to bring a map tracing home, (and my correctype...) but, we'll manage. Finally, we'll run things a bit out of their usual order this time for other various reasons. First will be a bunch of things per Cooper-Trent.

The following stations have been granted CP's for changes in directional pattern, XR location, ground systems, etc., and should be expected to test a bit b4 completion, so watch....

570	-	WFAA-Tx			1140	_	WBZY-Pa
	-	WHAP-Tx			1340	_	WAMA-SC
640	+	WHLO-Oh			1380	-	WLRO-Oh
810	-	WATI-In			1400	-	WGBG-NC
850	-	WABA-PH			1460	-	WXOK-La
900	-	WFIA-Ky			1480	-	KVAN-Wa
1010	-	WITL-Ky.	er	Mi.	1490	_	KLGR-Mn
1130	-	KWBY-TX			1600	-	KLGA-Ia

changes

*		KUKL-Ha KHMG-Ok	SCH: NSP (NRC) SCH: 24 hrs. off MM (NRC)
		GP -Ca	Thousand Oaks, AMT: D3, clarify (Father Jack)
+	16.31	KRPT-0k	Anandarko 1000 Dl (NRC)(RjE) (Len Kruse)
+	930	WIZE-MY	CP is on (JAC, no less)
+	990	WABO-lds	CP is on (HjE)
+	1040	KHVH-Ha	SCH: off SM 0500-1000, MM irr. (NRC)
+	1100	KFAX-Ca	Does indeed use early AM BC time as per log.
+		WHYT-In	Noblesville, 250 D3 (RjE) (Len) (NRC)
+	1130	KLSI-Hm	SCH: s/off 0300 (NRC)
+		WWCM-In	Delete CP, was init. decision only (JAC)
+		CP -Oh	Eaton, Delete CP, was init. dec. only. (JAC)
+	1140	CP -NY	Warsaw, 1000 D3 (RjE)
+		CP -Mo	Kansas City, 1000/250 U2 (RjE)
+		KSLY-Ua	SCH: 24 hrs., (ARC)
		CKDY-NS	Is on (NRC)
+		WTHE-NY	CP is (RjE)
		WFIC-Va	JP is (new stn.) (NRC)
+		WKCB-Ky	New call., Hindman CP (RjE)
+	1580	WPAC-WY	Delete Cp to 500 Dl, was only AXR CP. (JAC)

(for those who don't know, hi, JAC is John A. Callarman, our illimstrious former publisher. Father Jack is Father Jack Pejza, of Ojai, Ca. These big letters on this typer restrict the amount of words per line....)

	850	WIVK-Tn	Ending ET-mx w/ c&w 0300 2/16 (Jerry Starr, Youngstown, Ohio)
	860	KOAM-Ka	On w/ TT-mx 0230+ 2/15 (Marty Blumenthal, Worcester, Ma.) Welcome - RjE
	940	KFRE-Ca	OK on DX past 0330 2/16, much trouble from KHOS rs w/ ccw. (Starr)
		KIOA-Ia	ET-mx hrd w/ ID 0330 2/23 (Page Taylor, Butler NJ) ET-OC hrd w/ ID 0230 2/23 (RjE)
*	1050	unID	Hrd w/ a Johnny Cash single, followed by a c&w female w/ a record titled "Cincinnati, O-Hi-O" ard OO15 2/23. Coulda been WZIP or
	1110	WBT -NC	WCMS f/c. (RjE) Was off 0024 and on 'til about 0300 2/23, but only SS there (RjE)
	1130	WCAH-Mi	Hrd 0130 2/23 w/ WNEW off. Weak rr u/ them, but no further copy. WNEW on 0300. (RjE, Page)
	1190	WIXE-NO	DX TEST potent w/rr 0100-0200+ giving phone number (Page) Outrageous signal 0110-9215+ w/
**	*1100	KREX-Co*	rr, and accepting COLLECT calls (I did). I knew there'd me "station mingles" (hi,ERC) but "the station that wished on Metrolina and became a star", Yoiks. (RjE) **Hrd testing 2/13 0220 tune-in to 0243 w/ 50 kw non-DZ & 0245-50 w/ 50kw DA, but barely audible on latter. 50kw DA is for CH, as will be 10kw DA nites. Will be testing for next 2 wks. or so. Expected air date the first week in March. Will start 18 hrs. a day, maybe go 24. ADDress is Box 789, zip 81501 and, they WANT reports. (Rich Eddie, St. Louis, Mo.) Welcome & tnx.RjE
	1220 1230		Hrd w/ ID 0312 2/9 (Starr) On late for flood emergency 2/16 ending w/ SSB s/off 0210. musta been day pwr. (Starr)
		KHAS O Nb	Hrd DT w/ TT/OC & ID 0245 2/13 (Paul K. Hart,
	1240	WJEJ-Md	Ft. Worth, Tx.) Will have PoP either 3/7 or 3/14 between 0100 & 0500. 2/8 test was apowerhouse here. (Bill Stone, Claremont, Ont.)
		WEDC-Il	Exacliant w/ SS ID 0210 2/23 (Page)
	1270		Almost buried w/ rr u/ noisy TT 0210 2/23.(RJE)
	1320	WCVR-Vt	Almost buried w/ rr u/ noisy TT 0210 2/23.(RjE) TEST hrd w/ quiet mx, ID's in voice and rapid Morse 2/23 0059-0130+ (RjE, Page)
		WKAP=Pa	Had ET-TT 2/20 0100+, log sez should be Ab (11)
		WCVR-Vt	O200. Hmmm. (RjE) (again) Hrd on 2/9 test w/ exc. sigs. O255. (Starr)
	1330	WTRX-Mi	Hrd 0500 2/23 w/ WPOW on, quite potent w/ nx u/. (Page)
	1460 1480		LRC as usual w/ ET past 0150 2/9 (Starr) Hrd v/ f/c, ran well beyond 0140 2/16, discovered on tape replay u/ WSAR/WHBC mess (RjE)
		WTHI-In	Could swear I hrd a WTHI ID here 0145 2/16, but log lists s/off 0100. A change maybe, or just my ears playing tricks. (RjE)
X)	1440	WCDS-Ky	Had ET-TT-OC 2/9, very few ID's (Starr)

Hrd anneg. AN 0230 2/9 (Morris Sorenson. 1450 WHL3-Mi Emsdale, Ont.) (again, sorry) Hrd on ET w/ old rr 2/9 XX 1460 VIHT-MO 0123-0201 (Sorenson) Not even sure if on tho' semi-local. Only 1480 WHBC-Oh nrd wk. TT's. (Starr) +40 o/S9 here w/ Polka mx, etc. (Page) Hrd on tane replay ard. 3205 u/ Wall (Hje) Hrd w/ TT , ID, & polka mx after WoAR s/off 0218 (Blumenthal) Finally logged whis nasty 2/23 0317. Guess 1510 UJK**S**-wu I'll have to write 'em to shut up so's they don't wRM the WRAN-TEST 3/9. (RjE) S/off SSB 0030 2/16. (Blumenthal) early... 1530 WCKY-Oh Re last week's item, did entire ET w/ just 2 records, one: "No Time", the other, "Je-* 1560 WADD-NY sus Is Just All Right With Me", which, contrary to popular belief is not relig., but underground rock. (PjE) Had PoP-ET- w/ TT-mx past 0200 2/14. (Starr) KBIB-Ar Hrd ending ET-mx 0137 2/9 (Starr) Hrd w/ WKOG-Ga C&W mx on ET 0105 2/16 (Page) Hrd here 0100 w/ ET 2/16 (Blumenthal) Fairly clear u/wCAU w/ pop mx 12/15 1740. WKNX-Mi 1210 (Blumenthal) Hrd 1000 2/11, never b4 noted daytime(Soren-CKKW-On. son)

WGMF-1500; WDIC-1430; KWLA-1530; WBCI-740; WWDR-1080; WF0Y-1240; WSIG-790; WMNS-1360; KWVY-1470; WKJK-1600; WT0N-1240; KSYL-970 WYNS-1150; WLDY-1340 & WHUN-1150 by Page Taylor; WGMF-1500, WDIC-1430; KWLA-1530 by M. Blumenthal; WGNE-1480, WYNS-1150 by RjE. WDOC-1310; KDXU-1450; KBUN-1450; KLAV-1230; WIOS-1480; KRCB-1560; LPUR-690 by NRC ime I'll 1sit names in r/c column, so as to avoid duplication -KjE

Once again, please pardor the large letters & the errors, and so on, but this typer is really a truck, and I've no correct-type. Things'll be back to normal next week, so:

+ 1510 WMEX-Mass (s now off duty at 0200. (nk)

SATURDAY'S ECLIPSE MAY PRODUCE UNIQUE DX CX!

FRANK MERRILL Jr. - 10673 Saline-Milan Road - Milan, Michigan - 48160 Yes, it's a again after a long absence. Im DXing thus far this season has been quite spare, & I can easily list my endeavors of the entire season within this Musing, hi. SSS activity: WWDA-990, WCTR-1530 WHRM-1580, WCIR-1070 (for new frequency, ex-1060) WENR-1090 WMOB-840 (new calls) CKSM -1220, WRKN-970, WWLE-1170. Daytime: WLRO-1380. Evenings: HLJP-1010 WFIR-960 (new calls) TGED-1210 TGT-1187 HJCY-810 HJBL-1160 ???s on 1030 1040 1168, CKCV-1280 Tirana-1394 (Country #58 or something like that) WHOM-1480 (finally!) PJA6-925 (heard previously on 905 for me), CHRC-800. MM 11/10- WMEG-920 w/HI & YVOD-780. 11/17- YVNZ-1020 (ex-1030 for me) CKRM-980, CFOX-1470 w/Drake format rr. 12/7- WLLL-930 w/ET/TT 1:13am but extremely weak because of Aurora (I was trying to ID the SS there). 12/23- HJAE-919 5am. 12/25- CRGB-1310 presumed to be the FF w/no EE ID on the half hour (.Bill Raczko tells me that CKOY or some such is FF but had EE IDs too). (CKOY is ALL EE -ERC) ???-1400 w/FF poking through the mess at times around 2:30am. CJFP is NSP, but was CKRN also AN that morning, eastern members? 12/26, WDEE-1500 (ex-WJBK) heard A 12:00:01; they and given their final WJBK ID just seconds earlier on 12/25 & I just happened to be listening because of a friend's tip they'd go c/w just after Christmas & I already knew they were changing calls. MM 12/29- WKND-1480 & WWSD-1090 Specials were heard. 1/31 was the best TA morning I have ever noticed, wisignals all over the dial. Portugal-1367 heard, plus what apparently were Spain-1385 & Portugal-1594. Traces of Albania-1394 were still there as late as about 2am! By the way, my CHRC-800 evening catch was heard 2/8 on the way home from work along this one road where CKIW gets rather weak (in their null, maybe?) I have heard CJLX KRET XELO & PJB before along the same stretch of road so it might bear even more checking out. I'm really looking forward to the CFFB Special. Now, the way that everyone is hearing CFFB, even out West, how come Alaska hardly ever makes it beyond the Continental Divide? CorrespOndents, I've owed some of wou letters for as long as half a year but it may still be a while! Best DX to all & 73.

RICH RICHMAN - 14 East Cheshire Place - Staten Island, New York - 10301 For the sake of variety, I'll start w/the veries this time. v/q-WDAK (after f/up) v/1- CKEY WGWR & WQVA (after f/up). New catch of the week was WNRV-990 Va. heard 2/12 @ 5:58-6pm w/ad & nice s/off. WANT-990 Va. unn, logged earlier same SSS. A recent good catch I've neglacted to mention was WLIJ-1580 Tenn. 1/4, & 1/5 w/s/off @ 6:01pm. MM 2/9 provided the following let-down: A station heard testing w/c/w during WWVA's SP. As the signal was much weaker then that of WWA I figured I've finally gotten a second station on 1170. Then @ 1:53am, it was announced that this was WWVA testing their AXR w/5,000w. Enough Wanted List", namely WKOG, testing again, @ 1:17am tunein till 1:20 s/off. Test differed from previous ones in that the titles of the musical selections (recent c/w) were given. As soon as they left the air, another tester was there on 1560. They played the latest from Guess Who & the B rds - no ID heard, good signal. SS mx heard u/WHAM @ 1:35am, the Mexican, I guess. (Or WHNX phenonemon which is heard here & around the NYC area -ERC) The date of my mystery tester In 690 using a Johnny Cash album from 1:07-1:40am was 1/17. The AM of 2/17 found lots of activity on 1330 during WEVD's SP but nothing new. Each of the following had its turn at dominating between 12:15 & 1:15: WHOT WCRB WFBC KWWL on RS, & WMLT testing (announcement heard @ 12:33am). Thanks to Rick Marr for the WUST info. Thanks to John Johnson (in his 1/31 Musing) for showing those two cities in Va. & Ind. the correct way to spell their names, hi. NYC radio has suffered its greatest loss in some time - DJ Tom Clay has left for the WC. (That's awful, Rich - who is he? -ERC) Broadcasting (2/16) informs us WAIT is asking the FCC permission to operate unlimited time on their clear channel frequency. Would WTAE be the most likely candidate for this situation?: WMTR-1250 w/EBS test strong unID signal w/ad, during daytime, no clue from ad. Which station in Hawaii has the distinction of being the S-most USA station? I'd sure like to be there. RONALD T. SCHATZ - T. Division - USS Hoel, DDG-13 - FPO - San Francisco 2000 Reporting from Onongapo, Philippines, 2/8/70) Greetings from the Far East! Well, I'm sure many of you are wondering what happened to me. I'm now quite a way from my exotic position as "LA & Cuban DX-pert" from Uleta (near Mismi) Fla., as I was a few years ago. Now I'm a hard-working missile fire-control technician (FC radar) aboard a floating pyrotechnical platform, trying desperately to Thevenise my quipment but would rather see if it floats! But the long hours behind the scopes and meters are not all in vain! How else does a DXr get me see Samoa, New Zealand, and New Guinea? By the way, if you can get to New Zealand, go! The beer is 7¢ a glass & I a pitcher down there! Forget the CX, hi! Auckland, Gisborne & Tauranga were the parts visited, with a side trip to Rotorua for some fresh air. NZBC is very friendly; in Gisborne they went so far as to put me on the air playing U.S. rr & c/w & reading spots for 12 hours over 2ZG-1060 & 2ZC-1280 in "regional linkup". I regret not having a tape of it. Sorry, also, not to have had the chance to visit some of our Kiwi members during my stay - maybe next time. Also I saw Japan, Okinawa, Philippines, Hong Kong & Da-Nang; also Red China from a distance of 300 yards - close enough! I return to Cal. & ERBA meetings next month; I'm home-ported in San Diego. Local Hong Kong stations are EE "R. Hiki"-545, CC "Comm. R."-610, CC "RHK-640" CC "Comm. R. "-550 & EE "Comm.R.-1030. Macao's CC service on 740k gets around, & Philippine stations are a blast; one carried a hair-dressing (?) commercial involving two girls with swear words. Japanese radio is blah; they watch the colour tube there as much as we co - that's why. Before I close, I'll let you know that I'll be home in Uleta for three weeks starting in mid-April, so stand by down there! Good DX to all; it's great to be back! 73.

DAN PHILLIPS - X-2 Seminary Village - Louisville, Kentucky - 40207 New loggings are as follows: 1/14- WATI-810 logged RS 12:30pm with good signal. Same day s/offs included on 900 WOZK s/off 6:15pm, never heard in Ala. Also WDDT & WGOK-900, s/off 6:15. 1/23- I heard WCGA-900 Calhoun, Ga. s/ off @ 6pm followed by KCIU-1580 Mo. s/off 6:16. 1/26- I heard END-1580-TEST @ 2:42 u/WPAC NY testing. WPAC pretty well wiped out WEND in the E, I imagine. 2/6- I noted WCVL-1550 @ 2 for a new one. 2/15- I heard WKM-150 Gordon, Ga. testing from 12:57-1:12 w/excellent signal. Also noted was *WE-1480 w/r/c but no sign of WHEC DX. Others noted but already heard were WDIC r/c, KIOA WWSW CKOC KONO CKCY & WFLA. During the two hours I DXed this MM I noted the following carriers from 1:15 to 1:30: 1310 1400 1420 1470 1500 1540 & 1550. From 1:50-3 the following carriers were also noted: 850 940 (2) 1060 950 1400 1150 (KXLR?) 680 & 1490. I point this out because in most cases I listened for five minutes on each waiting for IDs which never came. Only TT w/ID was WKOG so for the morning I heard 16 TTers & had one ID. This is really ridiculous. I wonder what FCC would do if 1,000 DXers wrote them complaining about stations not IDing. Would they listen? Beautiful WX continues w/five" of ice on ground. It took 30 minutes to scrape ice off windshield of car. You New Yorkers have it made riding those subways, hi. Well enough for now. My wife is going into the hospital 3/6 for operation so DX season looks over for a while since I must become chief cook and bottle washer. 73s.

STEWART DRAKE - 2108 South Simpson Street - Philadelphia, Pennsylvania - 19142

All of a sudden after three good months w/many new loggings, the
bottom seems to have dropped out. So far in Feb. I have exactly one tentative
catch. On 2/4 a possible KJSK-900 Neb. TTing © 1:15am. It wasn't for lack of
trying though as I was at the dials each night possible. The one weekend 2/7-9 I
had to work & missed a few I could have used. On the verie side of the ladger, I
do have a brighter note. WFIR-960, WEPN-1600 WFIC-1530, & WKER-1500 all sent v/1.
So the store here now shows 2,517/2/375. Ine few days I will complete Il years
of sending for veries, though my first loggings were made a few months prior. I
have a few questions someone might be able to answer: On 2/12 on 1350 a TTor w/
various TTs 12:25-1, no ID. On 2/15 1600, TT w/v/c 12:50-12:56 when TTs were

played like a tune. On MM 2/16, 1560, 1:32 OC on, 1:35, a few short passages of mx, 1:40 three tone beeps, 1:42 carrier off, no IDs. Any help these would be appreciated. In the v1/ from WFIC the CE says he was surprised I heard w IC u/ wCKY. They should be on for further tests soon. The address is WFIC Radio, Box 475, Collinsville, Va. 24078. Collinsville is in Henry Co. & lies between Bassett & Martinsville. I saw in the local newspapers where WFIL AM-FM-TV were sold Triangle Pub. Co. I hope this will mean a change in AN policy & open 560 again. I have to agree w/the statementI noticed in DX NEWS about "Your Pest is my DX." Yet, it is disheartening when a station slops up adjacent spots along with their own. Good DX to all. 73.

RICHARD E. WOOD - U. of Hawaii - Dep't of European Languages - Honolulu - 96822 Latest veries: KXLE-1240 Wash., WGAR-1220 O., KYES-950 Ore., KNIT-1280 Tex., WFIN-900 Pa., most distant report, previous best was from Cal. I regard this as my best U.S. verification; one interesting point is that the DA of WFIN is a cerdioid, beaming due N; I have heard several stations which beam N, although I am in an SW direction from them. Explanation, amyone? (Over the North Pole arda?? -ERC) Must be a minor lobe. Also KMFB-1300 Cal., most distant report, KLEB-1600 La., most distant correct report. What I heard on 1/31 wes, it turns out, part of KLEB's annual PoP for the FCC. Just shows, it pays to keep your ears open every night, not only MMsx & KLAV-1230 Nev., most distant genuine report, although they say some people listen to the station while visiting Vegas but send their "report" after they get home. CX to NA continue famtastic, & it never rains but it pours. When my much-wanted 40th state, Miss., was heard, not just one, but two stations came in, in quick succession. Reports are out for 2/10 to WPUV-1580 Va., r/c, WAZL-1490 Pa. r/c, KTEL-1490 Wash. RS s/ off 2:01em, KOZE-1300 Ida. s/off 3:01em, WAAC-1300 for Ind. #2. Then on 2/11, WCIS-1460 Miss. r/c, WMOX-1010 r/c, in quite well, giving me two shots at verifying State 40, WSOY-1340 III. 2/12, KWYN-1400 Ark. noted ETing & dominating the channel. KFA-1510 Wash. seems to have stopped ANing again, & WMEX Mass. is often remarkable. My unheard states are now the Carolinas, Del. Md. N.J. & New England except Mass. Paul Hart has calculated WBAL-1090 throws only 10w my way, so I suppose I'll have to look for Md. elsewhere. Congrats to Alan Merriman on G&E -844 in Va., a fine catch, and a sign of what current CX are like.

FRED OSTERMAN - 436 North Forest Road - Williamsville, New York - 14221
844k brought a new logging 2/25 @ 7:54pm, NOT Gilbert though!
Thanks to phone tip from Ron Christen, St. Lucia was logged on this frequency w/
Love is Blue, then EE Caribbean NX, at 8pm. No positive ID, but it must be St.
Lucia up 4 kc/s. Oh well. 2/16 brought my 48th state - KIUC-1140 Nev. heard
very well on f/c-rr "Always three in a row on K-Luck". Taped & reported. Same
night, KELO-1320 heard on s/off for N.D. #4, KNOX f/c for S.D. #3. 2:38, WWUN1590 Jackson Miss. on f/c, continuous IDs. QSLs few and far between. KXRB v/1
for TEST, WVAB sent a receiption verification v/q for TEST. WBAA v/f for TEST.
v/q- KSJB VOW-755 Portugal, TIQ (& pennant). I can't wait to try for CFFBStill nada from WRYT (or KECK for that matter, hi).

AMN DOUGLAS R. JUEN - Box 10643 - CMR3 - Sheppard AFB, Texas - 76311
Greetings from Sheppard AFB. Well, since coming here about a week ago I really haven't got down to DXing yet. I do have a RX which I bought at the BX. It's a Sony pocket radio Model 3R-67 & it seems to be quite good. I hope to get a lot of DXing done on the weekends so look for a Musing here more often. To Buffalo area DXers: Hello, I'm not dead & you will hear from me often. To AMN Bruce Reymolds: I'd like to meet you & talk DX. I am in the 3776 S/S Room 304 so if you can look me up, please do. Before leaving for USAF 12/18/69 I got the following veries: v/q- KBIG WSPA WPDX. v/1- WHUT WIL WMHI & others, but I don't remember them. 73s & good DX. (The best to ou in the Air Force, Doug!)

MUSE OFTEN, GANG, AND REMEMBER TO DOUBLE SPACE. DEADLINE IS EACH MONDAY.

ROGER W. MINSOR - 718 North Fremont Road - Valparaiso, Indiana - 4038, Howdy. More DX. 2/8- KJLT-970 Neb. on f/c-17/mx 1:30-1:43. I don't know if it's a r/c or not, f/c list has first Sun., this was second. (It may be the Sun. following first Sat. - ERC) I finally logged KOFI-1180 same date 1:54-2 s/off for Mont. #13. WDOL-1470 Ga. copied on ET/rr & frequent IDs 2:15-2:25 fadeout u WVOL WOHO combo. KKHI 1550 Cal. in w/beautiful signal @ s/off. so taped & reported. Beautiful v/c back already. (Beautiful v/c?? -ERC) Also on 1550 an SS which sounded like XEMS or something @ 3 ID. Anybody ID this one for me please? 2/9- Strong GSQ-560 @ 12:10 most likely CJKL. Weak TT-620 during WVNJ's listed ric time, unn though. SS on 1194A looping Cuba, 12:30, but faded, so no ID hdard, if given. WCSR-1340 Mich. logged 12:40-12:56 w/frequent IDs and c/w also. WWCA-1270 has s/off @ 1:02 for the last two MMs, so perhaps a permanent sked change, ex-2:02. KRDS-1190 w/-S-7 beautiful signal @ 1:04. VOA-1196 Munich w/EE NX & ORTF-1205 good levels @ 1:05. Unk ET/mx on 1560, off @ 1:15, WKOG? WTTI-1530 @ 1:17 & on w/ET, sounded just like NNRC TEST in 12/69. Question - which one on 818 @ 1:32 w/man talking unk language, then into mx, perhaps FF language, Andorra? If so, where the heck is Andorra? ET all MM long on 1460 w/Little Richard albums, but no IDs. WCVR-1320 impossible due to :IIS. WOR off again/on again, but I did log KIRO 1:57-2:06 & again 2:56-3, much wanted & appreciated. Mow for KMPC. WDSM was noted w/c/w saying until 7am, so boo to them. maybe NSP. 2/12- WTAD 9 0 III. logged on RS 6:12-6:25pm fade, WLBL Wis. s/off @ 6:30, KMA-960 Ia. logged 6:44-7, mostly w/Lifeline. 2/13-WNJH N.J. on r/c nicely 12-12:15 w/repeated IDs, very little TT. CHLO-1570 Ont. on first day of RS on 1570 12:01-12:09 like a local w/rr. That morning I happened across WCMY III. operating on 1435k 9:09-9:30. I called them & they soon signed off. Normally WEEF/WIRE cover them. 2/14- KKIN-930 Minn. for a nice Valentine's Day present @ 6:25-6:45 s/off w/c/w. 2/16- WDAD-1450 Pa. s/off @ 1 w/SSB. WKOG w/ET 1:02, off by 1:25. WDXI-1310 Tenn. s/off @ 1:06, unusual to hear them on RS. WGNE-1480 Fla. on r/c w/Dixieland 1: 5-1:45, KWKY-1150 Ia/ on f/c-TT 1:45-2.

ALAN MERRIMAN - Box 6 - Fairfax, Virginia - 22030

Well, time for another Musing. CX have been excellent the past month or so, but very sew new domestics heard. Mostly foreign, w/CX fully as good as in 1965 but more consistant this time. Veries coming in nicely w/the following new ones: KECK KXRB La Coruna-638 WWSD KRBB WKFE TIQ-1203 Lille-1376 WAAB WVAB WCRV Droitwich-1088 WJAG WEEI WJSM Tirana-1088 Milano-899 WAYD WBIG & . WKND. Also one of the most attractive v/qs ever received from EAJ1-827, well worth getting if you can hear them. New DX: 1/12- WCRV-1580 w/32 minute ET/mx @ 12:03 . WJAG-780 kinds tough w/WBEM on but I managed a report. KRBB-1560 w/ f/c-TT 1-1:15, not regular, per verie. 2/9- WDEE-1500 for call change @ 12:50. KCMC-740 quite good @ 2 w/c/w. 2/10- WSAN-1470 @ 1, fourth report as I see they are now verifying. 2/13- WTLO-1480 fair 3:30-3:45 w/r/c-TT. 2/18- KFLN-960 w/ r/c-TT 2:20-2:35. This was rather weak & bothered by QRM but one to look for in NE if you need Montana. I don't think this is in the NRC f/c list. Foreign CX tapered off a bit now so maybe some new domestics will make it. I am looking forward to CFFB DX. I sure hope they make it here. Enough for now, 73, 11 later.

JOHN W. HOOGERHEIDE _ 3 Marquette Drive - Marquette, Michigan -Tape recorder DX brought r/c-TT of WAFI-1560 Middlesboro on second Sat. Attempts at second Fri. r/c of KFJM Grand Forks brought a TTer who s/on @ 2 & off @ 2:15, but all IDs wiped out by WSPD. MM 2/16- At lam, a strong het on 764k № @ 1:05 Arabic-type chanting @ S-3 level &in comes | Irica #1 in Daker, Senegal. WM07-1900 Surion 32. 72 Fox 5 1:1; a very 1 ... CBU-690 w/ NX @ 1:15, way o/Cuban; KWKY-1150 f/c-TT 1:30-1:45. Seemed to be an r/c, but not on list. Anyway not a great night but my first audio on a TA this season. I

"AN" SITUATION - ONS 710 WDSM Inc. MM, SPU (c/w) 1290 W T O C Inc. MM, SPU.

didn't think that it would ever happen.

LYON - 9415 Goodrich Road - Clarence Center, New York - 14032 DX this week looks like this: 2/8- KALO-1250 heard @ 2:03-2:15am w/r/c -TT u/WTAE - 2/9- WCSR-1340 heard 12:07-12:57am w/ET/TT/TEST very tough w/QRM mess. WCAZ-990 1:15-1:30 r/c-TT, WCVR-1320 heard w/ID @ 1:32am on TEST, very loud. 2/10- WPUV-1580 I heard 12:15-12:30 w/f/c-TT, WTID-1270 1:12-1:21am w/f/c-TT o/WXYZ, KCHR-1350 1:47-2:01am w/f/c-TT w/QFM from what seemed to be WSIR. Verie this week from WAVA, v/f & CM & rate card. C U later.

STAN MORSS - Route 3 - Broadford, Massachusetts - 01830 2/9- WTTI-1530 Dalton Ga. TEST 1:14am. WCVR-1320 Randolph Vt. lam S/C music. (What's that?? -ERC) WKOG-1560 Gordon Ga. test 1:25. KIRL-1460 @ 2:59am. CKIM noted off @ 3. KOFO-1220 Ottawa Kansas still on, 3:08am. TT-1270 to to 3:11am. WTOC-1290 still N MM. KHOS-940 Tucson u/WINZ 3:40-4am when WINZ either put on more power or changed pattern - first 250w. Arizona in a while. Verie, WKOG.

RODDY FREEMAN - 9029 Meadow Heights Road - Randallstown, Maryland - 21133 Hi DXers. Resuming daytime DX from where I left off last time Due to an image of WCBM, whose Owings Mills Md. XR is nearby, WHJB-620 Pa. is audible only shortly after sunrise, so I'm not counting it in my daytime-only DX. Continuing: 2/12- WMAL-630 D.C. w/MoR @ 2:37pm, WNBC-660 NY w/ads & MoR @ 2:40. WCHM-680 Md. w/ads, promo, MoR @2:44-2:46pm, WOR-710 NY w/ID @ 3pm. Next logged was WPIK-730 Va. w/c/w @ 3:14pm. Local WBMD-750 Md. whose beautiful new studios I recently toured w/"Trading Post" @ 3:16pm. 2/13- WABC-770 N.Y. w/rr & ads @ 10:33am; WAVA-780 Va. w/NX @ 10:37, WTAR-790 Va. w/ID following Arthur Godfrey Time" @ 11am; WTMR-800 N.J. w/MoR @ 11:05 and by turning radio, WCHA-800 Pa. w/ rr @ 11:06. WYRE-810 Md. w/ID, Marine WX @ 12, toaal number of daytimeonly loggings now stands at 19 from five sates & D.C. James Brown has taken over local Soul station WEBB Baltimore. With him comes a new DJ staff, led by the great "Moonman" most recently w/ UST Washington. Note to N.Y. area DXers: Does anybody know anything about a rumor that kingpin c1 mx station WQXR is planning a format change? Format changes also allegedly in store for WNBC. And what's this about WNEW auditioning talent on the air? I'm still doing the SM show at WNAV-1430 Annapolis. Anyone with any info, please write. Till next time, 73.

ERNEST R. COOPER - 438 East 21 Street - Brooklyn, New York - 11226 Some veries" vq from WWSD-1090, then v/ls from CKFL-1340, KRDS-1190 both w/CMs, and WKOG-1560 explaining they have had call letter mixups, but not explaining that my verie covered them during their second-time-around on WCIK. Nice to see a few veries for a change. DX: Wed. 2/18- Two loud SSes on 540, one w/few IDs (if any) between 10-11pm undoubtedly is R. Horizonte, Bogota. Behind them was Radio Corporacion, Managua, for a report this time. To the scientific Boston Brigade- is there such a thing as a partial Aurora? Like on the low end of the dial.but not on the higher? It sometimes seems that way here. SM 2/22- Company left @ lam, so I took a quick swirl across the high end of the band, and noted about threerrs on 1550, & the toppie turned out to be much-tri for WSER-1550, Md. on ET. MM 2/23- TTer on 1560 @ 12:46, unID. One also on 730 @ 12:47. WBT-1110 was off & noted was an SS 12:53-1:03 s/off w/Ave Maria, unID. Wixie-WIXE-1190 in nicely on TEST w/rr mx, & I phoned 'em as they asked. They stayed on till at least 2:30, and that may have been their OC the rest of the AM. CFFB? I don't think so - Much rr u/the Cuban Minute Man, but I sort of think it must have been the AFRS Puerto Rican, for there were scarcely any announcements noted - no Eskimo heard spoken, & I had been stydying that language since the TEST was first announced in DX NEWW, hi. Radio HIJB-830 Santo Domingo was AN w/ booming signal running WCCO into the ground here most of the time - don't tell ANing has spread to Objic country! I think the 4am s/on-SS on 540 is again Morizonte - they were on EST at any rate. UnID SS on about 855 AN; another on ST on 1000 after 3am IDing as "Radio Diez" (Radio Ten). Two SS on 890 w/WLS off @ 4:15am. WWRL & WNEW off much of the AM but nothing new there. CUN 7.