

MEDIUM WAVE
DXCLUB
Established 1933
34 issues par yeor
$\$ 1325$ Airmail $\$ 1000$ First Closs $\$ 750$ Third Class

OPFICIAL PUELICATION OF THF
NATIONAL RADIO CLUB
P. O. DOX 9 CAMERIDEE, MASE, ozIs
*DX'ing from Two Points in Oahu, Hawaii - R. Wood
*Information on Transatlantic Listening Test $\mathcal{G}$
$\therefore$ Auroral Conditions - G. Nelson.
*Thoughts on Construction of FET Loop - R. Edmunds.
*Corrections to Membership List - R. Kane.
*Supremacy Ratings - N. Maguire
NEW MEMBERS
Paul J. Abbot, 428 Popurah Rd., Fairfield, Conn. 06430
John W. Basehore, 603 Shephardstown Rd., Mechanicsburg, Pa. 17055 Frank Peters, 820 W. 34 th St., Chicago, I11. 60608
Charles Wehking, 10531 Kennerly Rd., St. Louis, Mo. 63128
Welcome to the NRC, gentlemen, we hope to see your contributions often here in the pages of DX NEWS.
Contest Note
From Dave "Fish" Fischer, manager of the Friendly DX Contest (rules appeared in the last issue of DX NEWS), comes the following correction to the rules: "Change November $1 s t, 1969$ (a11 occurances) in FDXC to read December 1, 1969."
fet loop kits
Don Kenney has written to inform us that he will be able to supply the wooden parts for the NRC Altazimuth loop antenna for those members who don't want to bother obtaining them locally. We expect to have full information on Don's offer next issue. We are still assembling the basic loop kits; we hope to have exact information as to availability and price in the next issue.

THANKS!

- f like to take this opportunity to express our appreciation to $\therefore$ - ey Sundstrom, Don Jensen, and the editors of Radio Sweden's 'isweden Calling DXers' program for their recent help in publicizing the ARC:



































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sleep, but at least it keeps me satisfied in our hobby. 10/13, I heari an unk good mx station" seemincly an ANer playing unannounced recordincs $\in 2: 31-2: 45 \mathrm{~m}$ on 630 k , in the background of a Cuben - who might that have been? I hope more on 630k, in the background of a cuban - who might that have

KEN LYON - ${ }^{2} 115$ Gootrich Road - Clarence Center, New York - 14032
No luck on the TESTS this week. I had heped to los Idaho but no luck I hope to do better with VERT \& WNAB. DX this week: 10/1- WHHO-1320 e 5;30pm s/off-SSB leaving CKKW; ULIK-1270 © 8:38pm w/rr o/WXYZ. $10 / 6-\mathrm{CHFT}-580 \mathrm{w} / \mathrm{ET} / \mathrm{TT}$ /mx \& WPTF under, w/HI while lookind for KOMN. WSRF-1580® $3: 36 \mathrm{am} \mathrm{w} / \mathrm{BT} / \mathrm{TT} / \mathrm{mx}$
IRC and aIl alone; WADO-1280 © $4 \mathrm{am} s / o n-S S B$, WIRE-1430 $\mathbb{C} 4: 03 \mathrm{am} \mathrm{w} / \mathrm{c} / \mathrm{w}$ quite IRC and aIl alone; WADO-1280 © 4 am s/on-SSB, WIRE-1430 © $4: 03 \mathrm{am} \mathrm{w} / \mathrm{c} / \mathrm{w}$ quite strang. 10/8- WSCR-1320 © 5:590m w/NBC NX u/WJAS. 10/10-CKEC-1320 © i\&c. No new veries this week.
JOAN W. HOOGERHEIDE - 3 Marquette Drive - Marquette, Michician - 49855
WHBG-1360 r/c-IT 11-11: 15 pm EST for new Va. station. This was followed @ 11:15 by another TTer assumed. to ve WWBZ-1360 in N.J. I thought I caught ID through WBAY, to $11: 30$ s/off, IDs every three minutes. Anvone who heard this $\mathrm{f} / \mathrm{c}$ drop a line. 10/10- KNIM-1580 Meryville Mo. all alone © 6:20am \& quite loud. - \#26 on 1580 \& my best frequency. 10/12- I had. new 10 g in WIOU1350 © 6:05pm w/CBS Sports. KLixX-1570 s/off 6:45, no anthem. 10/13- Iongsought CJOB-680 Wimipeg finally on AN sked © 1:45; KONN-910 Biling $f / c-T T$ w/ CW IDs only 1:45-2, this CW reaily gets through the GRM \& might be an easy Montana try. CIIEC-1090 Lethbridge w/NX © 2; CKDA-1220 s/off-GSQ © 2:02; CJOC-1220 noted in background; WVAB-1550 TT very loud, atop w/TRST. March mx noted on 120 2-2:25 but very much behind CJOC; I assume this was WERT's TFST, but boy, what a poor signal - I 11 bet they never get out very far. HJFF-1210 Ia Viz Amigo food on $A \mathbb{N} 2: 50$, XFB-1235 fairly good on AN © 3am. I sure hope anyone who needs Ore. noted KEX-1190 e 3.- what a signal: CJCB-1320 Sydney N.S. s/on © 3:57 I\&C, then WLBR-1270 atop. Totals, 1,042.
BART CRONIN - 253728 th Street West - Seattle, Washinction - 98199
Iog totals from Seatile now at 136 stations heard in 18 states \& four countries. A long way from the 1,071 stationz in 42 states \& 14 countries from last time I lived in the N.W. New additions of sifnificance: 10/3- KJPI980 Idaho Falls w/ET © 2:19 EST while listeninc to CKNV. 10/6- KOK -630 Reno s/ off © 2:01 for first Nevade of new list. CHMM-1320 Vancounver, w/ID © 2:30, poor level, but confirmed. w/stereo sicnal from CHOM-FM e 130 miles. CBR-1010 Calgary w/s/off e $3 \mathrm{w} / \mathrm{s}-6$ signal which I now get alongside KOMO-1000 which has an S-9 plus 20, \& no 100p yet. KSUB-590 Cedar City, Utah, testing © 3:30. SM r 10/12 \& MM 10/13 devoted to cleaning up the usual 50s: WHAS WCCO WOAI WFAA WJR KOB WHO. KODL 1440 The Dalles, Ore. noted on RS © 12:21em 10/13 for little-heard one when I used to live herc. Redio Equis-750, Managua, Nicaragua w/ID \& fanfare © 12:57 $\mathrm{w} / \mathrm{S}-1$ signel for my first CA on the new long, \& one I heard. cormon1y in Boston. Surprise w/CJSN-1420 Shaunavan, Sask.s/off © 2:13//-CKSW-1w00 (not heard) $\mathrm{w} / \mathrm{S}-6$ sicmal almost in clear with the exseption of station plaxine soul mx $\mathrm{w} / \mathrm{g} 00 \mathrm{~d}$ volume, but hizhly distorted announcer saying 1490 not able to get calls-who? KONE-1450 Reno w/s-7 in the clear © 2:27 for what will again be a pest as several years ago, along with KRPL-1 400 after KITI s/Off. WO Alaskans yet, but I am watching $660 \& 750$ for the usual, \& 650 for the new KYAK. IRCA bulletin sent me gratis says KIBH-950 Sewerd, Alaska has thrown in the towel,

## FISH - Iincoin, Nebraska - 68508

I'm retting close to being in the BCB groove for another season. Here's a few items of ppssible interest: 9/25- KTLM-920 Tex. in w/WX © 6:23am. 9/28-KESM-1580 k1 Dorado Springs, Mo. most-sought station $\mathrm{W} / 7 \mathrm{am} \mathrm{s} / \mathrm{on}-\mathrm{SSB}$, also three in a row: AII 730k, KSUD Ark. s/on 6:45 followed by religious program; KWRE MO.


12:08am s/off. ,, 10/6- KPHO-910 Ariz. 4 am plus, w/WX o/u OC. WIMA-1250 s.C. © 4:51am w/TX \& ID, WREN- 1250 Kans. SSB s/on $4: 58 \mathrm{am}$, is AN, off only MM. WTJS1390 Tenn. in w/morning show 5:10-pluc on. Besta DX! Say - I have lotsa BCB material and cear to $30-$ write for list, I'11 send when it's conplete.
Marv garpeir - 2539 Kessler Boulevard - Lincoln, Nebraska -- 68502
It was nice being in ST. LoITS and meeting many NRCers whose Musings I read every issue. I think we all owe Bruce Reynolds, Walt Breville, and Dave Carlson a bis THANK-YOU for a job well done. I was out in Cal. all Summer \& met four or five DXers there (IRCA-ers). I did some DXing there w/a transistor portable, but it was tough cetting anything good w/all the Bay Area stations as locals. Some veries in, though: v/q- KMMT KRID WOAI WMC CFSL. v/1KSOK KMTI WMr. v/c-CFRN. v/f- ZNS. That brings my totals to 315 veries from 40 states, six provinces, \& 13 countries. Canadians are 55/48 for slightly o/ $87 \%$ return. C UN N 14 . 73 .

RICK EVANS - Box 1988 - Gary, Indiana - 46409
Hello gang. Not much DX here this week. I had hoped to get into the 10/11 DX NEWS but guess I didn't. 10/10- WBAY-1360 Green Bay Wis. noted © 1:20 while I was tightening my 100p; WTLO-1480 Somerset, Ky. 2:30-2: $45 \mathrm{am} \mathrm{r} / \mathrm{c}$; KATZ-1600 St. Louis 4am; WPTR-1540 Albany in AN, rare here w/KXEL but unn. 10/ 11- WBEL-1380 s. Beloit, I11. 4:40-4:47pm w/slop from $10 \mathrm{ca1} \mathrm{WIIH}-1370$. MM 10/13 - KIZ-560 D 3 nver 12:25-12:46am after local WIND s/off; WGR-550 Buffalo ID © 1:17 while listeninc to WKRC in Cincy; WJRK-1500 Detroit FIT 1:50-2; WVAB-1550 Virgin ia Beach, Special 2-2:15. I have nay thoughts on this TEST but it wouldn't pass Emie's tepprriter, so I won't sey them; wMEX-1510 Boston 2:48-3:15am. 10/14-WMPC-150 Belersfield, Cal. 2mm s/off. 10/15- WAT0-1290 Oak Ridge Temn. 3:04$3: 20$ Ji (this is when I heard them); WOL-1470 Nashville 3:20-3:30 RS; WAAY-1550 Hun sville fla. weak but clear 3:35-4; wFBC-1330 Greenville s.c. 4:05-4:20am; Huncsi-10 Ala. Weak but clear 3:35-4; 4:5Cem rr; minI 1350 Rame N.Y. s/on-SSB $4: 55$, not too good. NRC IOg says PSA of 4:50em rr; hiny-1350 Rane N.Y. S/on-SSB 4:55, not too good. NRC Iog says PSA of 190w: MN:-1350 Norton, Va. s/on 5:03; WVOW-1290 L gan, W.Va. s/on 5:30 but
couldn tit hold them; KNOE-51+0 Monroe, La. 5:40-5am; WREC-600 Memphis 6-6:20am; couldn't hold them; KNOE-5'to Monroe, La. 5:40-5am; WREC-500 Memphis 6-6:20
WIOM-6OO Hew Orleans, $6: 15$ poor u/WREC; WCTT-630 Corbin, Ky. 6:20-6:35am.
 Twelve new stations that mornijs. Totals here now $661 / 327$; 38 new stations this
month alone. Vories: WKIS WMI TMIX WINH CHSC WSUN WVCN KGBS WIOU KDTH. WINH month alone, Varies: WKIS WIIL TMIX WIMH CHSC WSUN WVON KGRS WIOU KDTH. WINH caid I vas "probably the only one listenint to the first broadcast from the new$1_{i j}$ re-1ocajed. XR." They also added "thanks for letting us know it worked on the first cie\%." 73.
dAN MYETS - Box 311, or, 5315 Homeland - Toledo, Oh $10-43601$ or 43611 (resp.) Greetings, NRCers. Too lons since I've made myself heard. Latest DX: 10/6-3:22 KWCB-1300 on f/c. 10/7-5:58pm, WJSO-1590 s/off; 6:11 WIIY-1210 s/off. 10/3-KFAL-900 s/off. 10/10-Much-wanted WCSM-1350 © 5:15pm. 10/11-WWWI-1090 6:06pm I\&C surprise! 10/13-2:05am, WAB-1550 TEST reported, \& WERT1220 TEST (I'd better hear it, hi) e $2: 12$. $10 / 14-6: 15 \mathrm{pm}$, WCCR-1580 I\&C, anothef surprise. 10/15-5:27Pm, $\operatorname{WBCA} 1440,5: 28 \mathrm{WGRD}-1410,5: 29 \mathrm{WMP} 0-1390$, three in a row, I almost fell off m , chair! 6:05pm, WRSY-1580, \& $6: 28 \mathrm{KBOA}-830 \mathrm{~s} / \mathrm{off}$. Veries: v/c- YFJZ WRIT CFCO WIEC CKLw (wow, hi) IOID (also wOw) WHBQ WERH WIMJ v/1- WSRF TMMI WCOG WJS. v/r- WIIJ. Talk about fast service on WNWI- heard. Sat. eve, report mailed Sun. noon, verie received Wed.! Anybody got v/s for WVOJ $K S B P$ KHCB $\mathbb{M M N}$ ? I Zot mi antenns, a $200^{\prime}$ longwire, ruming due $E / W$ up, finally. How I want to build the new NRC Ioop, and then I'll be all set, hi. Totals now 482/45. I enjoyed both IRCA \& NRC Conventions, anc meeting DXers on my trip in bewween. If I can, I'm zoing to try to make both Conventions next year too, even though New York and Vancouver are a little distance apart, hi. Knoring me, thouzh, I probably won't. Well, since DX has picked up a lot, I'm busy most of the time, so 73 s for nuw.
REMGBER, WE'RE WEEKIY - LET'S BE SURE THAT DOESN'T BECOME "WEAKIY" - REPORT!

## DX FROM OAHU by Richard E. Wood

A practical experiment in medium wave reception at two different points on the island of Oahu, Hawaii, was conducted on two successive nights, June 28 and 29, 1969, during local mid-summer.

On June 28, reception was effected in Kailua; on June 29, at Sunset Beach, some 25 miles away. In both cases, a Hammarlund HQ-180 receiver with a spiral loop were used.

Kailua is situated somewhat to the north-west of the extreme southeasterly extremity of Oahu, 11 miles north-west of Honolulu, and separated from that city by a mountain range averaging between 2,500 and 3,000 feet. This range extends to the south-easterly point of the island, and thence in a north-westerly direction towards Sunset Beach, at average heights of 2,500 feet. Assuming reception from Kis act as an obstacle to radio reception, best reception from Kailua might be expected to be from the southeast, the south southworth, and northwest; with attenuated signals from the south, southwest, and west (see map).


Sunset Beach is located some 7 miles south-west of the northerly tip of Oahu. The Koolau Range runs directly south-east and to the far end of the Island; not beginning, however, until some six miles inland and not constituting a barrier directly to the east. From the topography, attenuation of signals from the south east might be expected. Another mountain range, with its peak at 4,000 feet, lies some 12 miles south-southwest; some attenuation might be expected from that direction.

Receptions effected on the dates mentioned, when overall conditions were basically similiar, were found to be strikingly different in the two locations.

In Kailua, best reception was from the south-east, with numer ous loggings from Latin America (Chile, Argentina, Peru, Ecuador, Colombia, Venezuela, plus many Caribbean stations). Among U.S. stations, while California ranked first and Texas second, signifbe surmised be surmised that south-easterly signals are funneled along the north side of the Koolau mountains into Kailua. Stations from Canada and the Pacific Northwest were quite well audible; but, on 1470 kHz 號 Channels, Mexican stations dominated, e.g., 1150, lical observations would lead the listener to believe that he was located off the west coast of Mexico, which is
indeed the location of Hawaii. Only a few Pacific area stations were noted, the 7 best signal being from Tahiti, slightly east of south. Although mid-summer is not the best season for Asian reception, Japan began to come in shortly after local midnite.

From Sunset Beach, empirical observation might lead one to conclude that one is actually located some 2,000 miles farther north, off the coast of Washington or British Colombia. The loudest signals are not, as in Kailua, KDAY, XERF, XERB, PJB, KFBK, and others from California, Mexico, and farther south, but rather CKDA, CJVI, CFCN, KPNW, KEX, KGA, and others from Canada and the Pacific North-West. The Mexican border stations were noted, but XEW alone was noted from Mexico city; XERF was no better than CHUB, and XERB was drowned by KING. From rom Kailu, The only other Latin American signals were PJB and traces , che. even weak1y.

Railu's own station, KLEI with 10 kw on 1130 , suffered severely from CKWX pR Kailua sown station, by late evening the 3,000 mile distant station dominated the one 25 miles away.

The dominant stations on certain frequencies, at appropriate times, were:

SUNSET BEACH

| KGBS Calif. | KTRH Texas |
| :--- | :--- |
| Empty channel | WFLA Fla, KCHV Calif. |
| CKNW B.C. | KFWB, Calif. |
| CFGP Alta. | XEG |
| CFCN Alta. | CB106 |
| KNX, Calif., CFAX B.C. | KNX |
| KING Wash. | XERF |
| KAYO Wash. | XEJP |
| Empty channel | CBIl8 |
| KIT Wash. | KFOX Calif. |
| KOL Wash. | KYNO Calif. |
| CRMM B.C. | KUDE Calif. |
| KMO Wash. | KGB Calif. |
| None dominant | KPAT Calif. |
| WEED Ore. | KVEN Calif., KTIP Calif. |
| KBZY Ore. | KDB Calif. |
| KYXI Ore. | KOMA Okla. |

WCAU, Philadelphia, was the only northern E.C. station ohserved equally f' well at both locations; however, at Sunset Beach, it was heard right through K200, Honolulu, 10 Cubans) ; at Sunset Beach, only a trace of CMQ.

From the pacific, Kwajalein was significantly better at Sunsct Beach, and Ponape, only heard once in Kailua, was quite well heard, suggesting Ponape, so far only hearc once in kailua, was quite wal at both locations. that it is a regular logging there; Majuro was about equal at both locations Reception from the Southwest, which is slightly east of south, was definitely whereas reception from Tahiti, whe New Zealand, which are somewhat west of south better in Kailua; Fiji, Tonga and New Zealand, whouthwesterly bearing was were not noted in either location. Australia, a soutions for the South Pacific slightly better from Sunset Beach; recepthion conditions for the time of the experiments, so that did not appear to be particularly good at the time of the experiments, so-tha
these results should not be considered definitive; Alaska, which is due north











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## Address Changes

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N = Inadvertamtiy onaitted from Membership List.

Telepnone Tip No: 212-582-0844. All Times in DX News are E.S.T. 10-25-69. Reporters: Please use $8 \frac{1}{2} \times 11$ paper, one side only. Please type if possible.

540 Mexico. XEWA in fairly strong most evenings after 0000, good ID tape at 0055 10/14. (Rogers, Nqshua, N. H.)
587.5 Saudi Arabia. Noted here in Sweden booming in evenings around 1600 EST. (Ericson, Växjö, Sweden) (The 1200 kW xmtr at Riyadh here x-600)
620 Nicaragua. YNM has been announcing " 620 " for years while merrily trans mitting on 615. Continued announcing of 620 does not necessarily imply a change in freq. (Wood, Hawaii) (Quite a few LA stns apparently so)
640 Cuba. CMO with US R\&B (Rhythm and Blues) mx 2315 10/13, sounded like the music had been taped off-the-air from Stateside stns. (Rogers, N.H.)
647 Turkey. Cukurova Radoysu, Mersin hrd 1815-2100 due to Turkish election 10/5; quite good signal but they do not use 300 kW . (Ericson, Sweden) unID. Can anyone ID the EE stn u/WSM 2210-2215 10/11? (Rogers, NH)

675 Nicaragua. YND Managua $\mathrm{s}-9$ plus 10 db most of the evening. Only QRM wa from someone (probably WAPA) on 680, 10/7. (Russ Edmunds, N.J.) Malom Radio hrd thru WRKO QRM 0044-0046 10/14. (Rogers)
700 Janaica. J.B.C. w/EE nx u/wLw 0010 10/4. (Rogers)
701 Turkey. TAW Istanbul hrd 1815-2100 10/5 ER w/QRM from German. (Ericson)
720 China. Peking hrd $100010 / 11$ w/Russian svce, repeat at 1100 , both times III II 620, 1120 and some other freqs. (Wood, Hawaii)
725
740 Venezuela. Radio Maracaibo YVNC Li\&C $10 / 2 \mathrm{w} / \mathrm{clear}$ ID 2046. (Winsor, Ind.) (Welcome to IDXD, Roger-Ed.)
** 746 unID TA. The one in IDXD 10/11 issue must be Holland which has been on the air late, part of an international radio exhibition in Amsterdam. They even had interviews on the air in EE. Operated late 9/22 to 9/27. (Bengt Ericson, Sweden)
350 Nicaragua. YNX burying WSB with 20 over s-9 signals appx $233010 / 7$ ( RJE ) 750 Venezuela. YVKS Radio Caracas in at 2301-2305 10/8, one ID. (Rogers) YVKS Radio Caracas in briefly $011510 / 6 \mathrm{w} / \mathrm{ID}$, male vocals. (Edmunds, NJ)
765 El Salvador. Hrd w/CST TC "en K-I" 0006 10/15. (Glenn Hauser, Col.) Venezuela. Onda Metropolitana de la Radio Nacional de Venezuela, YVKK hrd here every night, very strong w/this ancmt since 10/1. They are in Valencia and with 50 kW . (César Objío, Dominican Rep.)
750 Br . Virgin Is. 2BVI, Tortola hrd w/rock mx pgm in EE, ID as Zed-B-V-I with 10 kW on 10/4, 1910-1930 then fade out. Reported, Ctry. 29 here. with 10 kW on 1d.) (Welcome to IDXD, Joe-Ed.)
BUO Neth. Ant. PJB atop the freq with Dutch $202510 / 8$ and into SS request Pgo 2030, first time hrd up here at new QTH. (Rogers, N. Hamp.)
sio Colombia. HJCY Bogota strong w/nx 10/4; no WGY. (Kureth, Md.)
516 No. Korea. This freq and the 820 outlet still in use sinultaneously and carrying the two different Home Service pgms from different locations. NRC's IDXD.... Unduplicated Foreign DX Coverage! (Wood, Hawaii) new 400 kW xmtr. (Ericson, Sweden)
unID. Signal here and on 826 quite a het but no audio $003010 / 15$. (Hau- ser, Col.) (That famous guy, D.X. Crush says it's TIOS xatg double sideband with their 825 carrier suppressed, hi...just a 1 kc TT...) reports. (César Objlo, D.Rep.) then was using a smaller rcvr and different antenna. (Millar, Everett, wa) Montserrat. Cf. 10/11 IDXD, I very much doubt that Plymouth broadcasts in Spanish. (Wood) (I agree-must have been YNKW hrd here-Ed.)
Japan. JOHK, Sendai $100010 / 11$ with time signal, ID JOHK Sendai dai hösö' followed by network IS. (Wood, Hawaii)
los. Teheran w/new superpower xmtr in Farsi. Good from 1130 until 1530 have a . (Ericson, Sweden) (A bit early for ECNA reception, should best of Colombia 1a for over consisten hour, semi-local at times. Place-name pronounciation was (Agrees with Nat'l Geoomat (Nood, Hawaii) Aruba. Per a tip from Bill Grant, Radio Victoria hrd here $10 / 15$ till 1830 s/off $w / r e l i g i o u s$ pgms in EE, anncd freq as 920 . Strong signal Maybe a freq change, or a defective xtal in their xmtr. (Blunenthal, Hass) 26 Turkey. Izmir hrd 10/5 1815-2100 w/Turkish ER, best of 4 freqs noted nere, a s-9 signal, QSA 5. (Ericson, Sweden) (This is probably the best bet for ECNA from this country, along with 647 although Mersin is quite far to the East, along the south coast; Izmir is to the West. Depends on their sked, too. Needless to say, Turkey reception is uncommon here! ) Venezuela. YVNN Punto Fijo exc at s/on 0458 10/13. (Hood, Hawaii) Punto Fi io s/off at $230210 / 4 \mathrm{w} /$ Venez. NA. (Objío, D.R.) ( 5 . Venezuela. Radio Monagas, YVRB IDing at $225710 / 4$ and s/off with NA at
Venezuela. Radio Tricolor loped out. (Objío, D.Rep.)
e su radi" hrd It su radio" hrd for first time $10 / 6$ at 2109 ID, every night thereafter. Colombia. Enisora Mil Veinte, HJBN Bogotá s/off 2246 10/12. (Objío, D.R.) Esparta hrd IDing at 2255 and s/off w/NA and anncd s/on estado Nuevo time next morning ( 0455 EST) ; hrd 10/12 (0bjo Haiti. 4VEF w/relig (045ms in ; hrd 10/12. (Obj1o, D.R.)
1050 E1 Salvador. YSU San Salvador hrd $10 / 6 \mathrm{w} / \mathrm{unbel}$ ievable
mestic channel 2035-2045 f/out for a doYSU ingles which were 3 whist. Had male/female ancrs $\mathrm{w} / \mathrm{nx}$ and numerous YSU jingles which were 3 whistled notes, chime, vocal "yay essay ooh"... nobody could have missed that one, hi. (Winsor, Indiana) unid. SS pgu w/ax, anncg Radio Tempo 2000 10/5. (Kureth,Md.) (I think this must be YVOZ, Radio Tiempo, Joe-Ed.) fairly quiet SS mx and much talk. Any ideas from M.S. or C.O.?(Conrad) Costa Rica. TIQ, Puerto Limon at $000010 / 13 \mathrm{w} / \mathrm{mixed}$ LA and US pop songs and strong het against ORTF Bordeaux. Anncr was in EE but with such a strong (Caribbean) accent and such a mixture of So words that it was almost unintelligible. At 0030, I hrd this 1 , copied word for word from my tape: "The time is correct in our studios, outside we have exactly past 11 o'clock is thirty minutes". They are EE until 1900, then SS until 2330 and then back to EE until 0100 s/off. (Conrad, Fla.) Nicaragua. YNRPS Radio Granada assumed the weak SS, rough freq to sepaR. Granada hrd $10 / 13$ as usual but a check on the scope showed another carrier that abruptly disappeared at 2100:30. No audio except Granada's hrd. By the way, they play many NA standards and many Radio Granada ID's between records. (Jerry Conrad, Haines City, Fla.) pgm and good level. (Wood, Hawaii) loudest Asian after Peking-620. (Wood, Hawaii) bably PJAlo drifted to here but too much 1330 to get any ID. Very strong carrier but rather shallow modulation. If it is PJA10, would like to log them. (Conrad, F1a.)
 really cuth tiarouj＇．IIt maril varliha wi 2340 $14 / 12$ ，fals between eace


 Kazalharam＇






 etiLD．LA usre，toltit cogy $2245=2320$（Gu）
1313 这LD．Lat lusch，





1465 Halti，ha Voin thu Jerd，SVLA，Cay latian，ard sjoll 2214 on 10.11 and very wak．（dijfor，D．Fep．）
 and nat hrd here．（mijfo，N，it．）
 at 205）10ת11．（001fo，D，in）






 （－ry foniect loa witin a mal raport La defini－nly unlieliewaile－Ed．）



 much ealif．（Cumrad，Fla．） Wueh Ealle，（Cumrad，Fla．）
1410 miscat and OWF．HilC Eascerp kelay Starkee，Lbaifah Ialand．Very aperific v／1，all details，froe I，\＃，Davey，far C，5．，External Iraad－ caatinH，Lamum，hriee the oanse，＂Tastern Melay Seatiant＂（Vood，Howaili） less service．a dienel pover atalin operated by the Diplowatic Dire－

 insalinaeatloe plank．An interesting feacura of tinis scation is that
 rhonles are lacated a few hundred feec aray fron the iti tranasircing barenoa．गhe istand is eatrenely fut，and with hlgh hunidisy，banaly barren rock，－－fras aretie inc．
｜manis for the cout inued yood aup

Cansidaring that sare than 7,000 metium－kave alationa are ourrontly brosd－ onsting througout the world，is＇s interesting to discover that almont no serlous sciontific atudy has aver been sade of very long diatasoa Mi propagation．Whila Iterally thousinda of prapagation experimanta ant atufies bsve been undertaken to provide trester inaght ints ahortwave．longisve，ahd even VHF reoeptidon，the MN bruadoast band lonc reastned neglected because of in number of hititortoal and tachnical problant．

The last axtanaive study of long－distance 18d recaption patterns of interent to tha WN DXI teak in the $1970^{\prime} \boldsymbol{n}$ ．Felloring in extensive meries of meswurenents of MA eiensl strangths on peths from liorth Averice to Buroge and South Anerica，the workers ouncluad that long distance MW reception was moch bettar on Horth＝50uth paths then on 三ast－nast pathe $=$ all factors soch as porer，antemas，and distanee
 atgnal potha usa very eonalderable：the the average，alpmals fran South Anerles furifed from 25 to 50 Limaz atronent than oquivalont Surupest sigesis，At the tirn thia diacorery was ternel＂a renarkahle tranmanainno snonaly＂；the only explanstion than offored suceated that the ricrale from Europe wore somenc being weakened ky thelr passage through the＂auroral some＂ovar the North Atlanti $=$ ．

With the advect of international progruss of edoperstive seinntifie research such as the International Geoptysical Yas（IGY），and the axtenalve use of
 gathar conaliderahie information shout the state of the＂murorsl zone＂on a daily basla．Drarine the past few years，a nimber of menbera of the shational Jadis tluit
 acientifio data aspoodated xdth auroral avents in an atterpt to woover the axaet connection between patterne in Irensetlantio No the receptices and events oocurring within the auroral recian over the fiorth Atlantic．Owr porinary obenoern（and a
 and atyndogi reooption pattarna $=$ thet is，periods of elther wery good or yery poser Pis Foceptians．

Very lelinfly，the aurorsl region affecta if reomptime sallew．After osrtaln 亡ypes of solsr dsaturbances，electrically ełarged partiolen（eoatly protons ani electrona）fall or preateltate inte the upper recionn of the Earth＇s stmophers．Some of theae particles are durped out of the thin Allan radtation belte whith surround the Barth，and sons are aotualiy ejeoted froe the Sin at the tine of the oripinal nolar disturbance sone days asplier．Faceuse these elaried partielen fall inte the Atroapbere alone the lines of the Barth＇a nagretie fleld， most predipitate into the upper atnsaphere in a ring－ahuped raglon osetiered roughly on the Magnette Fole．Ths rocion of grastast pracipitatian ta called the Aurogs ECne；1ta axact Location depends th then of aolar diaturbanof an we vill sae in a somant．While verny fich frequancy ratio atemala can astualiy be
 asin precipitation awont produces a layer of axtromoly high Mo signal absorption si sheight of about 05 idloseteri（about 50 dilas）abore the Earth．Mo signals whid enoountor this rogion are vory strongly staorted arter travellins anly a short distance in the suroral regions the enargy contained in the radse algnal ill converted directiy ints heat in the upper atwoaphmre．
 the auroral zire te mo s partleular might wo shoald be mile te prectiot juat which aignal paths will be opee and which will be fonociced oit by auroral absorption． Figure 1 shous the owitition of thil aurown sone after nang days of Ime solar activity（widen are particularly equeton in ywara with low sumpet nurbers）．What
 are "in the clear" and MW reception is unaffected by the auroral zone. Nights such as represented by Figure 1 are quite rare and seldom occur more than a few times a year (September 21, 1969 was such a night). Figure 2 shows what might be thought of as "typical" auroral conditions. Note that the region of auroral absorption extends further to the South; the intensity of the absorption is also absorption extends further to the south; the intensity of the absorption is a much greater than before. Note that some of the TA signal paths will now be Boston to Germany - it's just about the most Northerly path that's still open. On Boston to Germany - it's just about the most Northerly path that s still open
such a night the Scandinavian stations are inaudible, whereas signals from such a night the Scandinavian stations are inaudible, whereas signals from
stations in Southern Europe are not absorbed at all. Figure 3 represents a stations in Southerm Europe are not absorbed at all. Figure 3 represents a
period of high auroral activity; note that the auroral zone now extends much more period of high auroral activity; note that the auroral zone now extends much more
to the South than before. The amount of a absorption is extremely intense during such an auroral storm and all MW signals Europe and North America are totally blocked since all such signal paths must pass a considerable distance through the auroral region. The two worst such storms so far this year occurred on March 24 th and September 30th; on those nights even signals from semilocal stations were affected by the presence of the absorbing layer which was then directly overhead.

Therefore the exact location of the auroral zone is very important in determining just which set of Transatlantic stations will be audible on a particular night. Or, working backwards, by comparing the TA receptions of MW DX'ers in many different areas on one particular night, we may be able to produce a detailed map of the exact location of the auroral zone on that particular night. This is the basic idea behind this particular listening experiment. The general location of the auroral zone (as suggested by certain scientific measurements such as geamagnetic index and fiometer values) agrees with overall eA reception patterns as indicated by Figures l-3 extremely well. The purpose of this experiment is to gather enough observations on TA receptions for one night to enable us to locate the position of the auroral zone with great accuracy on one particular night. The position of the auroral zone thus measured will be compared with the scientific data gathered by research installations and earth satellites on that day; from this we hope to gain more understanding of the relationship between MW reception patterns, the position of the auroral zone, and various geophysical measurements. Another result of this experiment will be an indication of just how well the auroral zone follows the Earth's magnetic field - that is, whether the Southern edge of the auroral zone is smooth as shown on our drawings or is somewhat "ragged".

## what to do

This particular listening test will be very simple; depending upon how the results turn out we may either repeat the experiment some time in the future or modify the procedure somewhat.

Beginning around or slightly prior to the time of sunset in North America on November 7 th (about 1650 EST or 2150 GMT that date), simply keep a careful recond of which Transatlantic medium-wave stations are audible, together with an Indication of how well they are heard on that night. If you are an experienced Transatlantic listener, we ${ }^{\text {td }}$ also like your personal judgement on these TA receptions - that is, whether a logging is uncommonly "good" or "poor", or about "average". From this subjective data we hope to get some idea as to whether or not the test night was typical or not. The test period will continue for 8 hours until 0050 EST or 0550 GMT on November 8th; by that time dawn will be occurring in Europe. All Transatlantic receptions that are made on the test night will be important data for this experiment; in the event that you log a station and are unable to identify it, supply us with program details and times and well see if someone else identified it - we'll let you know promptly by return mail in such a case.
(All but one of the following stations have already been heard with good signals in North America this year. We have divided these best bets into three groups representing high, medium, and low latitude signal paths; naturally the signals from the high-latitude stations may be inaudible if the auroral zone extends relatively far to the South on the night of the test.)

* indicates that the station remains on the air nonstop all night; otherwise most of these stations sign off around 1900-2000 EST.
\$ indicates a high power station which should be easy to hear if conditions are even moderately good that night.
high Latitude paths:
1525 China. Radio Peking Russian language service; this is the highest latitude path heard in North America.
$\$ 1313$ Norway. All Norwegian language; usually strong when auroral activity is low.
1223 Sweden. All Swedish language; may be strong but suffers strong interference from Spain on same frequency.
962 Finland. Finnish language; usually bad interference from strong station in Tunesia (in Arabic) on same channel though.

MEDIUM PATHS:
\$1586* Germany. German language; this is the most powerful station in the modium-wave band.
\$1554* France. All-night music program in French.
$\$ 1466$ Monaco. Monte Carlo in French.
\$1214 England. BEC in English; may have bad interference from Albania on same frequency.
$\$ 782$ Portugal. Usually very good level in Portugese; lots of recent popular records. May be some interference from Germany on same channel.
$\$ 737^{*}$ Spain. Barcelone is usually very strong if you can escape the interference from CBL on 740 with a good receiver.
683* Spain. Not quite as strong as Rercelona; all in Spanish.
647 England. BBC, sometimes good before WSM on 650 gets too strong.
LON PATHS:
$\$ 935$ Morocco. Usually extremely strong every night in Arabic until signoff at 1900 EST. Also a German station on same channel.
$\$ 764$ Senegal. Dakar is usually very strong in Arabic and French before signoff at 1900 EST.
$\$ 548$ Algeria. Usually strong in Arabic early evenings.
$\$ 529$ Morocco. Quite strong in Arabic if you can tune this low.
Please send all loggings for the test period to: NRC TALT, Box 99, Cambridge, Mass. 02138.

## INTERNATIONAL DX DIGEST

## Propagation \& features <br> Gordon P. Nelson <br> 19 irma Avenue <br> Watertown, Mass. 02172

$\frac{\mathrm{DX}}{\mathrm{f}}$ conditions during the past fow weeks have continued to improve on TA paths following the major auroral storm of September 29-30. We appear to have experienced a period of extremely good TA reception on October 19th and thereabouts; we will hold off with the detailed description of conditions until next week when we'll be able to better follow the recovery from the big storm. The following graph shows the value of geomagnetic/auroral disturbance as measured by the Fredericksburg Afr index; data supplied by ESSA. High values of Afr correspond to the initial phases of a major precipitation event (see short article on this phenomenon on page 13).
"*" day featured good TA DX "*" day was highly auroral
"1" day was outstanding in Hawaii
a


## 18 DOMESTIC DX <br> DIGEST

Randall Kane
130 Beacon St
Boston, Mass.


## 02116

## A

790 KGHI-Mont "Good" HE Pgr w/ID it 0054 10/13. (0ray saringeour)
ك 910 EPRO-Ariz $10 / 6$ 0400+ w/wX o/u OC. (Dave Fischer, Lincoln, Neb 930 WKr-ckla w/BO stna $10 / 13$ nt 0110 A o/s PDT stn mentioning Lon angeles (KHJ, probabiy) (Gray) Lattor format idontioal to WFKO/OKLD eto? (Ni)
9/0 KFRR-Cal Weak at 0202 s/ofi ID $10 / 13$, w/2 other western stas (1 CRW, possibly KHOS). (Scrimgeour, Ont)
KTOA-Iown Had OC ET W/ID at 0200, 10/13. (Serimgeour)
WYTD-La S/On $0300 \mathrm{MM} \mathrm{10/13}. \mathrm{(KGS)} \mathrm{Huh?} \mathrm{(het)}$
1070 E3DR-Del W/IDs \& nx well atop 0151-0158 s/offf 10/20. (WRYT)
1100 unID
1220 0JOC-A1ta
CKDA-BC
$\therefore 1240$ KAVE-NM
+1.280 WDSU-La
+1300 WFBR-Ma
1360 WWNJ-NJ
1370 KXLF-Mon Possibly KFAX w/religious pgm 0308 10/13, weak. (KGS On top by 0235-0245 10/13, note later than CKDA by $1 \frac{1}{2}$ hours. (Scrimgeour)
Easy thru CHSC's OC \& GJRL's 0110 s/off 10/13. (KGS) 10/11 0130 ID \& TP during unlisted $\mathrm{f} / \mathrm{c}$; previously hrd on 2nd harmonic. (Glenn Hauser, hrd in Colo but presently in Oklahoma and headed for Thailand. Good luckl) S/off $000810 / 5 \mathrm{w} / \mathrm{SSB}$, (Fish)
S/off now 0100. (Frank Waldron, Matawan, NJ)
TT ending 2335 10/10, at WRYT. (Marc DeLorenzo)
$010610 / 19$ talking o/SSB at s/off!l I find this rather offensive. (Hauger) They were probably standing up..
+1380 CFDA-Que
1450 WMAJ-Pa
WHSG-SC CHUC-Ont
*1510 WMEX-Mas S/off 0100 SM $10 / 12$, gave s/on as 0700. Note: may be a late SM s/off, like many FFCs. (Waldron, NJ) ID at 0100 10/20. (WRYT)
R/c-TP ID hrd 0044 u/unID RR 10/20. (WRYT people)
Sports, ID, wx 2314 10/19. (WRYT)
ten not on RS MMs $9 / 29$ or 10/6; rk, what did you listen to? (Waldron) WECB, of course. Per Geoff FOX, Was,
1550 WSER-NA
WVAB-VE

HKGO-C6
730 KSUD-Ark KTRY-La
KWOA-Minn S/on 0658 no SSB $\mathrm{f} / \mathrm{by} \mathrm{mx} / \mathrm{wx} 9 / 28$ ( F ( sh )
KWRE-Mo S/On $0645 \mathrm{SSB} \mathrm{f} / \mathrm{by} \mathrm{mx} \mathrm{9/28} \mathrm{(Fish)}$
20 KTLW Tex $9 / 250623 \mathrm{mx}$ (Fischer, Nebraska)
1250 WREN-Kans $10 / 6$ s/on 0458 SSB (Fin
1250 WREN-Kans $10 / 6$ s/on 0458 SSB. (Fish)
WTMA-SC 10/6 0451 in w/TC \& ID. (Fischer)
1390 WTJS-Tem ET/mx ID hrd 0104 10/19 after WKBA ET s/off; RR. (MD) IRCA DX barely hrd u/OC 0223 10/13 w/continuous IDs, asking for reports. (Hauser) Cf. Katz in $10 / 18$ DDXD; not hrd here shortly after 0200. (ak) (Waldion 毁 Ex-WCIK was using this call by $9 / 28 \mathrm{ET} / \mathrm{mx}$ at 0112

$$
\uparrow
$$

560 WQAM-FIa Hrd o/almost nonexistant semilocal WFIL 10/7 2302-8,
610 WIOD-F2a excellent. (Russ Edmunds, Wayne, NJ Even w/semilocal WTP all eve 10/5-6. (Edmunds)

830 WNYC-NY Wes on til $000510 / 8$ W/results of Brooklyn primery 19 elections. (Edmunds)

* 930 WHAN-Fla S/off never later than 1800 , 1700 Sun. (Jerry Comad)

1110 WSFW-NY
1120 WWOI,-NY
:1130 WPUL-FIa
Fnd of Public Affairs pem into GBNN $172310 / 20$ o/WUST End of Public Affairs pgm into cscN 1723 10/20 o/w
S/off sum 1730 (early). (Conrad Haines, City, Fla)

## SEHE DULLES

- 870 WKAR-Mieh CP 18 ons. (EAmpuns, NJ)
+920 KFIF-Iows Via Broadossting, has lost license \& has complete stn for sale (all of part); guess we can safely cross this one out. (Terry Starr, Youngatown, Ohio)
+980 WONE-Ohio CP for U2. (RJE)
+1130 WMGA-Ga CP is on here, Dir South at night w/250w. (Conrad)
※1360 WINT-Fla Has been off days w/ETs evenings, OC/mx \& no IDs. (JKC)
+1370 WFEA-NH NOW 0400-0000(2300), Jay. (Waldron, NJ)
+1390 WAVP-Fla Is probably permanently off, no plans to return. (JKC) +1450 CIIUC-Ont $0500(0625)-2315$, per $10 / 12$ s/off. (Waldroni)
+1480 WAPG-Fla Is not on. (Conrad, Fla)
The tips credited as "WRYT" are the fruit of a G.J. Fox/Marc DeLorenzo DX session on MM 10/20. You see, boys and giris, all-around nice guy and benevolent though now inflated Geoffrey lives there... in order, of course, to host publishing sessions. That's all...


## ReadingTime:Two hours.



SAUGUS, MASS. (LNS) IN AN UNPRECEDENTED ACTION, THE OFFICIAL NRC EXPEDITIONARY FORCE T,AST YIGHT CLALMED PREVIOUSLY UNEXPLORED SECTIONS OF LYNN MARSH. LED BY PETER GO!!AN OF STUART STREET FAME AND BY ADMIRAL G.p. Nelson, the group inspected ancient ruins and compared the strange


## Paul Gough, P.O. Box 263

The old saying "no news is cool news" does not holit true for the NRC Newsroom. The more the better. Next deadline is sunday the NRC Newsroom. 2 for the Nov. 8 issue.

## Music Til Dawn reachinr Sunset

American Airlines has announced that its award-winning program of zood music is not boing renewed by four CBS-owned stations when the current contract expires at the end of the year. The reason is the stations. WCBS, WSBM, KNX, and KCBS "plan to expand their present news prorramming format throuchout the night," according to AA.

According to the company, ilscussions are currently underway concerning the tuture of the prorram which is nlso bronatives WEII, WJR, KRLD, WTOP-FM, WLW, and KOFM. Amons the alternatives as FM.
(American Airlines)
couple of ry-radio ruides from "dom under" contain the following interestine bits of information about radio there: $--3 X Y$ started sept. 15 a dating game in mhich iisteners fill in data which will be fed to a computer wh select 100 couples. The couples hosted for on evening by XY announcers.
--Spegting of announcers, Keith Livingston of 3 KZ has resigned after seven years to be of sil things a taxi driver.
3kZ has fust completed the second stace of a $\$ 100,000$ - new has studto project. The two new sturios, among other things have a hich-fidelity proxram monitorinp system and a compact light annunciator panel built into the "pips." wall to slert announcers to news bulletins and lime iadies
-- Xix seens to be the station were to be treated to a fun lunch" in a Nelbourne wine cellar. "It's a feature specially for the ernovers and will become a rerular, fortnightly rendevous," sald the will become a rezular, (Listener in-TV--via Chris Hambly)

Petition Campaisn Started Arainst Bee's in Californiz
A campaign to gather some 200,000 signatures to convince A F campaign to gather some the Federal comunications of news was started in late September on the west coast.

The company owns the Sacramento Bee. The Fresno Bee and the The company owns the Sacramento beetions and seven radio Modesto Bee, as well as two television stations anations are: KFBK, outlets, scattered from Reno to Fresno. The AM stations are. KFBk KBEE , TMTM KOH .

According to a comment in the Modesto Bee, the action jy a local businessman resulted from "his inability to stlence fair and needed editorial comment made by the Sacramento Bee. (Hardester)

RANDOM THOUOHTS ON THE CONSTRUCTION OF A FET ALTAZIMUTH LOOP ANTENNA

## by Funssell J. Edmunds

First, let me establish the premise that all NRC'ers should endeavor to obtrain a FEI altazimuth loop, since with the advent of the loop kit, there is no good reason whatever for denying oneself this necessity. There are, however, of which, perhaps the physical size of eviate some of the drawbacks to a loop, of which, perhaps the physical size of the loop is the most important. The will take up. While it is presently impractical to arding the amount of space it altazimuth loop converientily portable, it can be to attempt to make the FET least moveable. This can be done by two methods. First, is a portable, or at denonstrated at the 1969 Convention by Duane Glese. This is the chod which was enploying a tripod as a mount, which is done by purchasing a foldingt of base ( Allied Radio part mumber 118 2043 W for example) ang a folding antenna foot length of $1^{\prime \prime}$ inside diameter steel pipe. The pipe, is held into pane the inside of the antenna mount by means of the setserems held int place mount, then the dowel of the loop is slipped into the pipe.

The other method is to purchase the same section of pipe, threaded both ends, and a pipe fitting known as a floor flange. This attachment should accept the thread on the section of pipe, and can then be bolted into a 2 foot square piece of $3 / 4^{n}$ plywood. This gives a solid mount for a loop, wich be made moveable by the addition of plastic casters to the underside of the base. If these casters are positioned even moderately carefully, there should be no probilem of stability.

Another problem which has plasued loop buflders in the past is a convenient Way to avert the friction problems generalily encountered in the rotation of the loop itself, as well as in the tilt arm for the altazimuth loop. This problem is neatly solved by the procurement of a type of liquid plastic known as nVarathane". This product is produced by a company called "Flecto" and is advertised as a liquid plastic especially suited to coating wood. It appears to be almost totally irictionless, and in addition, it is impervious to almost everything rom acid to abrasives. furthermore, it can be used to coat the entire wooden superstructure of the loop to retard warping or other undesirable dimensional changes.

Still another problem, although less severe, is in the length of the transmission line used in balancing the loop. The specified length will probably The bit short, and the reader is advised that this does not mean the end of of auto antenna cably means that you should try to purchase about twelve feet two shorter leabs, which should be all that is necessary transmission line of up to six feet,

Finally, do not your Q-spoiling potentiometer (component $\mathrm{NNn}^{n}$ in orig without the FET anp, and jour $Q$ FGS, and is inserter is becalse this item is designed primarily for use with the sans-FET 1000 circuit with plans becanse it is actually a part of the basic are even more pleased win wind that you are even more pleased with your loop than you would have been without them

22
RICHARD RICHMAN - It East Cheshire Place - Staten Island, New York - 10301
CX continue to be very rood. MM of 10/5 found an SS toppin: 960 , but no ID heard. U/SS was an EL announcement that Hurricane Inca would. probebli. miss "us", according to the latest advisory; I'11 chalk it up as Bermuda, teniatively. A sood graveyard catch came © 10:59pm 10/5. This was wCMI-13lo in well above the mess, gafr heard. Ions-wanted. HLOF-950 Fla. heard u/APEI w/ Ir © 11:35-11:42pm. Minutes later, an SS heard on 1480. The ID © 12 in both SS \& Eassured me I had logred a new country: Suerto Rico. This was (MDD. Sere AM (10/B) found. wKYE-1550 Tenn. testins w/c/w © 12:23-12:32am. The s/off of WAZI-1490 rose out of the Pa. Eraveyerd © 12:15am 10/11. SSS on 10/11 found WJEJ-1240 Ma. W/"This is Redio Hacerstown ID © 5:29prn o/local WGBD. SSS $10 / 12$ brought three new catches: wINX-1E00 Md. u/loca1 WRL, w/contest offer C 5:10pm. WCOJ-1420 Pa . 1ogred C $5: 15 \mathrm{pm}$ w/relicious procran in spite of TMJR slopover. I station heard w/WX shortiv aiter 5pm u/NNTR, but not IDea. A H.J. station that had lon eluded me was caucht C 5:29-5:30pm, MVB-1440, w/instrumental mx \& s/ off. IM 10/13 was eagerly looked forward to $\mathrm{w} /$ two TTSTs to shoot for, \& no worts all day 10/13. New logs taken on KCV \& WOB, both in nicelv; neither verifiea earlier reports. WWDC-1200 D.C. hearc © 12:48em w/arfe drivinj messace. CFOX all alone on 1470 © 1-1:03am: w/auto ad, and rr. A pleasant surprise was a listenable wiBJ-1490 Mich. w/instrumental mx \& ID © 1:15am; mu first Mich. Zraveyarder. CJRP-1060 Que. W/FF amouncenents, but $\overline{E P}$ sont © 1:42-1:45an. Much wanted XeLO heard u/CKIN w/"Record Roost" "comiñ to you from Mexico's fourth 1argest city" © 1:53m. Before tryins for the Specials, I made one lest check of the dial for 2 am IDs. What I found was one or the hichlichts of 1909; WMCA was having an SP. Thanks to the situation, I lowred. CFRA-580 ont. w/NX/NX $2-$ 2:02em, \& on 570-itself, yas wrim ra/NX followed ber c/w, 2:03-2:03em. The VERT
 the TEST, but XTB was giving them a rough time all the wey. Our neichbor to the $S$ was all over the dial that morninc: 540800000122010501570 . The wAB TEST was heard $\mathrm{w} /$ /requent IDs \& TJB mx $\subset 2$ 2 21 arn to $2: 25$. The sinnal was excellent...

BERNARD DUFFY - 350 Richmond Terrace - Apt. IP - Staten Island, Hew Yorl: - 10301 The new iormat of DX NEAS is a rreat improve, ent over the proVous one. The "list of stations" is also a wonderful improvement and is suries whe: WCYY WTM WGY YTOP WKB: \& CHNS. WHCU's is plain. Recent $v / 1 s$ came from: CKCY WTBQ WPNO WCVR WTMJ VAFI \& WBTS.

HAL ROBIE - 273 South Street - Medrield, Massachusetts
The new bulletin size is welcomed here as an improvement - easier to handle and file and similar to the old Radex. It's hard to beat the BPC, hil Sorry to have missed the ST. LOUIS Convention. P1ans were made early in June when I wrote Deve Cerison, but -. had to be chanzed at the last minute so I called The Pariway $8 / 28$ to cancel reservations. CX improvinc of lete $w /$ mary of the recular I'As and Carribean stations on the dials, but no new countries here for me. I visited the Maritime Provinces in August and noted a few of the radio stations, but no time to tour them. I did photocraph CrCy, Charlottetown, PRI, however, as it was a real thrizt when I heard and verified them on e $\$ 15.00 \mathrm{RX}$ back in 1940. I hope to be able to find a little time for DXine this season \& an occasional contribution of value to IDXD pares. 73.

RON CHRISTRN sends us the BUFFALD BIILS' FOOTBALIL NETWORK:
WWNY-790 Wetert own; WHCU-070 Ithaca; WBEN-930 Buffalo; WENY-1230 Elmira; WJTII 1240 Jamestown; WSSI-1340 Lockport; WSAY-1370 Rochester; WFBI 1390 Syracuse; WDOE-1410 Dunkirk; WFDI-1450 Olean; WBRA-1490 Batatia, \& WGGO-1590 Salamanca, NY.

HEARD SINCE LAST ISSUE: WINH, new XR site (TRRC) (frequency not diven). EVERYBODY- PIDASE REGIN MISING- BUT PIRASE REMEMBER WE HAVE A 30-LINE LIMIT:

GEORGS KBLIEY - 118 White Street - Belmont, Massachusetts - 02179
CX seem to be improving. Most of the stronger TAs are back, but the Las are still puttinc in tremendous signals. I've been tryinf to get on Argentinian durint this period of Auroral CX, concentratinc on $950 \& 1070$. No pos itive IDs ret. Other DX: 10/8- WKYE-1550 Tenn. heard w/ET \& c/v mx © 12:258m conclucced © 12:30. 10/12- WSRF-1580 Fla. ID @ 11:25pn, rr formaw. 10/13- IIQ-1203 costa rica very stronz © midnight in be w/pop nax. 0rir-120, Trance also noted zood. 12.05, un. 12:30 w-sele-talk show. Now for those specials: WERT-1220 Ohno was heard. e a w/a fair sinni, however, the Mexican was really clobbering him. when I looped XLB out, CJoc Alta. was on top, so weri was not dominant on 1zzo. I needed cJoc anyway, frinje benefits of that TEST, hi. WVAB-1550 Va. was heard w/a very stron sicnal 2:05. I did not try for the wo. Tesi e 3, because 950 looked a mess. I wonder if/...? (Nope, hi -ERC) Meantime, back at NRC publishing ses sion, the crew was hard at work. When I left the latest session I had to put trust:- Volvo on automatic pilot. Pardon me while I roll another. Good DK.
RON CHPISTEN - 30 Lucille Drive - Cheektowaga, New York - 14225
MM 10/13 was excellent here, w/stations as follows: TIFC-1075, San Jose, C.R. heard w/s/off e 11:34pm in EF. CKDA-1220 © 12:20 made B.C. of iciall heard here, TT from KXRA- 1490 Minn . in © $12: 40 \mathrm{w} /$ frequent IDs. KOMO1000 in $\widehat{C 1: 01}$ for first Wash. heard, repors out. WVAB Special logzed e 2:07am w/excellent strenth and many IDs. While trying to 10 c the KMER Special, KIMN950 was hdard For Col. "f2. Also heard (tentative): KJR. CJOC-1220 Iethbridge, in 3172 3:34am for report. A1so 10/13, XERCM-660 CMDC-770 \& YVOD-780 were 10ysed. Fotals now stand e 638 heard. Tentative loceinz also on 10/13 of KOMN 910, Montana, C 2:56am. Local NRCer F. Osterman told me to go to 910 via the land-line, but all I got was the TT (Fred got a code ID earlier). Much of my DX 10/13 must be attributed to F.O., and vice-versa. We check in every half hour over whe ohone, exchanging tips. We will check in more frequently as soon as I Tet a pionc in moom, So far this system has worked with excellent results. To close, I'11 sa: that I will diady correspond with anyone. See ya in 7.

VILLTAF B. FIIDI - 9931 Glenn Dale Road \#303 - Lanham, Mary1and - 20001 Not too much to report this week DX-wise. I did. manage to cet a uncie to see those amazin Mets up in Baltimore on Sunday in the second same o: the "orld Siries. Usual TAa are back in now \& have even noted one or two unuenal (for me). DX: 10/12- InID TA-827 from 11:05-11:150m w/cl orsan mx, but no ID or tialk and faded arter 11: 5. I thousht this might be Sofia, but I heare nowhin else this M from that far kast. OMGH-660 Santa Clare from 11:50minnjo w/iD as R. Progresso \& s/oif w/Cuban anthem. 10/13- XEFPM-660 Mexico D.F. from 12:Olem after CMGII s/off w/progfam "La Hora de Mexico" or "La Musica de Mexico and mx selections. CsB2-1034 Lisbon from $1: 15 \mathrm{am} \mathrm{w} / \mathrm{man} \mathrm{w} / \mathrm{talk}$ in PP, botherec. $\mathrm{S}_{\mathrm{y}}$ Ho splatter. UnID SS-1502 w/soft slow SS mx from 1:35am, any ideas on this? Seems too early for Canaries and might be an LA. WERT-1200 Van Wert, 0. from 2-2:30am w/TBST \& easily recomizable march music. I had QRM on this one from CJOC/CKDA (also new one for me) \& XEB. WVAB-1550 Virginia Beach from 2:10-2:15 w/continuous recorded ID \& TT - made tape of this one so $I$ could concentrate on more difficultVERT. At 2:30 I tuned down to 950 and noted WPEN S-9plus 20 is decided KMER would not make it, so I went to bed. TAs were noted on 8453817829359441406 (exceptionaly strong) $1205 \& 1554$. Unexplicably missiñ here was 1586 this AM. WiRT's march music was easy in material, but there was no much variety for promram details for report. I transcribed an nouncements word for word and used that, since I didn't know the names of the matches. 73 and. C U N 7 or so.

Wfif bichilis - 9127 Coral Drive - St. Louis, Missouri - 63123
Hi all. We were indeed luck that we had a relatively low stat ic level durinz the MM DX session at the Convention, for ever. since the noise

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level has been rather bad w/poor DX CX until last weekend (10/12) when a cold front passed through here \& put an end to the static. I'm gradually getting back to fishine the medium waves asain. Iatest results are: $9 / 8$ - I losced the $\mathrm{f} / \mathrm{c}$ of KXRA-1490 Mim. 12:30-1am. IDs were frequent, prompt $\mathrm{V} / 1 \mathrm{back}$, stated this is an $r / c$ (unlisted), second MM of each month at this time. SM $9 / 14$ I found an ET from WBU-1487 Salem, Va. 1:05am. 10/13-WTPR-710 Paris, Tenn. we: o/WHB © ©:16pm s/off. 10/16-KSE0-750 Durant, okia. quite zood © $6: 55 \mathrm{am}$, then © 7:O4 KMMJ Nəb. was IDed u/KSEO. I was giad to hear that the proposed Postal cor poration plan lost a round in the House last week. For those of you who don't know, this Corporation woulà operate the Post Orrice completely independent from Congress and par its own way without the large (over I billion) subsidy from the government that it gets now. This means that unless the brand-new Board. of Directors in the Corporation find a way to make up this deficit, and experienced postal workers will tell you they see absolutely no way how without raisinc rates \& cuttins services, we 11 be paving uneathw,jnsyessed postare in the future if this Corporation goes through! Perhaps we can help kill this threat to NRC \& all redio clubs for good by writind our congressmen demanding the Plan (H.R. $\frac{10}{7}$ 11750) be completely scrapped, and urge Postal reforms \& improvements through the Dulski Bill (H.R. ${ }^{-4}$ ) which provices for Postal reform within the present framework of the P.O. Dep't. remainine under control of Congress. Well, I wish all of you a real yood new DX season, \& 73s.

DICK TRIUAX - 3472 Dixiana Drive - Iexington, Kentuckr - 140502
The great Aurora of $9 / 29$ has so far vielded me 36 new 10 Eicinss as of today 10/13. First sign of Aurora-1ike CX was evenino, of $9 / 29$ when semi-10cals WCKY-1530 \& WLAC-1510 had. very fast flutter beginning abous 9pu. Mi 10/6 was a washout w/much static \& no 2uck w/KIDO KOMN \& KBGN Speciais. MM 10/13 was more fruitful w/seven new catches. KBUY-1540 Tex, noted w/clenn Campioell Show $\mathrm{c} / \mathrm{w} \mathrm{w} /$ Ione ID © $1: 16 \mathrm{am}$ o/KXEL. WEDC-1240 I11. noted C $1: 45 \mathrm{em} \mathrm{w} / \mathrm{SS}$ ID $2_{\mathrm{o}} \mathrm{mx}$; werc

 Ariz 63 am w/ID \& CBS NX. To Hoozerheide in Mich.: Your wirl as now $\because C C=$ as 0 at least $8 / 15$. Count me in as a potential purchaser of an futurs fer A1iaz: muth Loop kit: With this last Aurora my total 10 ord since $2 / 1 / 0$ has been boosted to 859, within strikin distance of my coal of 11000 ह- 2/15/70. 'hac outlaw on 1610 from cincy is now usins call of WPTR - thic shcila be ear: rom anyone in Miduest on Sat. \& Sun. eves from 7-10pn at least. Ho sien of CP of WREM-1000 in Jenkine, Ky. yet.

RICHARD E: WOOD - Honolulu, Hawaii - 96822
Verifications: KYJC-1230 Ore., which obscrved, "Mr: Cod - what a distance! ", JTRB-360 \& KOMY-1340, Ca1., KSO-1460 Ia., KRRB-1000 S.D., KHLL1440 Cal., first from $\mathrm{H}_{\mathrm{am}} \mathrm{mit}$, \& I presume the most distent; KRKD-1150 Cal. first from Hawaii \& probablij the only one as due to change calle soon, WhZE-860 Fla., most distant report; I rezard this as one of m" best, being my first low-frequency verie at $u / 1 \mathrm{kw}$., CKVL-850 oue. for a mew province, a very specific $\mathrm{v} / 1$ in beautiful FF for report in same lañuaze, WVON-1440 Cal., WNB-1550 Va., most distant report, previous best was San Dieso; Va. \#\# and one of ay best. NA DX excellent in first half of Oct., and reporis out to $\mathrm{KAOR}-1340$, $\mathrm{KVZZ}-800$, KNCR 1090 Cal., KFKF-1540, KBKW-1450, KJJ-1420, KTMA-1460 Wash.; KGAY-1430 KMIL-1590 Ore.; KIKK-650, KBOR-1600 Tex.; KOKA-1550 La., KCBC-1390 Ia., CHML-900 Ont., WIC-1050 Ont., CKXL-1140, KARK-920 Ark., KBMY-1240 Mont., plus Alaskans, etc., for which see IDXD. It is interestins to conpare Bowab 's observations in Cuba, and $\overline{M V}$ own in Heiti, Curacao, etc. as well as other reports from Guatemala, S . Mexico, ctc. where few or no U.S. signals are listenable, w/Hawail, where © 2400 miles, from U.S. mainland, more U.S. signals are clearly listenable, nights, tha any location I have tried inside the continental U.S.
iet's hiave those musings, boys - but let us remind you - the limit is 30 lines:

JOFIV JAVEISKI - 104-21 122 Street - Richmond Hill, New York - 11419 It's a lond time since uy hallowed words have been mutilic...2: ERC's typewriter, so I zuess a re-intro is appropriate for the benefit of all fledzling NRCers. I'm 19 and a studient at Brooklyn Poly Tech majoring in Elec ledil. follows: $1,113 / 336,10 / 7,45 / 43,841 / 19$. DXIng will be curtailed this season due to a heavier workload at Poly, but I hope to twiddle the dials occasionally, especially on MMs. RX here is a 1966 Lefayette HA-700 w/a $43^{\prime \prime}$ box loop \& by the wey, Richmond Hill is in queens County, a borough of N.Y.C. in which both WRKO \& WERA are audible days so draw conclusions from that, hi. As far as recent DX goes: New WILE-1170 N.Y. has been heard w/OC days from 5 am till SSS, first noted. 10/5. More on this later. 10/8- R. Sutatenza-960 was $20 / 0$, sure sounded like 125ikv. Iast IM 10/13. produced a loud Cuban on 770 © 1 as WABC off by 12 , as well as WIBC. On 1220, the channel of the $A M$, a CBC net ID was heara. © 1:29; who could this be? No IPRTs on 1220 \& no affiliates as far as the Lol shows. C1 mx followed this \& $\mathrm{u} /$ this a 98.5 FM spot © $1: 31$ \& a comedy program to 2 , culminting in the s/off of CKDA-1220 B.C. © 2:05 U/WERT TEST. This was my 10th proting in the slol followed w/a rr ID © 2:06. Unn WKKO-1580 s/off © $5: 55$. 10/24 AM: Cuban on 1308 noted © 12:09, WBCT-740 TEST was quite weak but lograble 11:40cuban on 1308 noted © 1 - CTM WTOC WCTK (now WKGO) WNEB WCRO \& $\mathrm{v} / \mathrm{rate}$ card from WDD O $10 / 15$ NRC $r$ Dour Iomerson, home on Teave, \& I joumeyed up to Cornwall WDA. to 8 in $\mathbb{N}$ on the
 we secondar, roads ena tarte dace is 1170 M in Mechonicsvil1e, a bic Sat. at 12 local time \& WGNY-1220 r/c is third Thurs. © 12 , both w/Cambridee. ...
bill alisausifas Jr. - 7 Avenue B - Haledon, Hew Jersey - 07508
Hi zanz! I fizured it's about time for a Musinc açain. Thincs are still slow here DX -wise due to meny reasons, but one in particular: Brends, hi:: ( $f$ Zirl or a hurricane, Bili? ERC) fnyway, $D K$ looks like this: 10/14-RSR-1380 s/off e 5:30pm like a local, w/no sijn of WMMz, also on 10/17 WMT-óz C 5:10em while in car about a mile from here; I fizure it': close enouch to count, no? And finally tocar $10 / 18 ® 4: 58 \mathrm{pm}$ I heard. WCDQ-.220 for call chance from ex-TZE. No new veries since no new reports are out, hit Oh, for 8.1 who missed WKBy's production of "War of the Worlds" last year due to $C X$ and went to hear it, they will re-broadcast it ajain in orizinal form on Halloween nicht, probably C 11pm like last year. I sure hope CX are good this year! Also I won a pumplinn-full of candy on WALL's "Super-Ghoul" contest today, \& was intervieved briefly on the air by D.J. Gene Pelh concermint clearly in Haladon. As discussed before we went on the air, he asked again what orzanization I belonged to, what type of RX I had, etc. Doubtless to say, the NRC rot a good pluy in Oranze County, N.Y. todgy, hi! Well, that's about all there is from the disaster area of North Jrrsey, so till next time $73 \mathrm{~s} \&$ good DX

FRED OSTEMAN - 436 North Forest Road - Williemsville, New York - 14221
I wasn't in the mood for any DX in September, due to our loss of Ralphie, who cot me into NRC. I really miss our bi-week ly gatherings down at his DX Den w/Ken \& Chuck. Ralph dia so much to promote the hobby, and. bette station-1istener relations. Not too mach foreimn DX here, just YSCF YSS TIFC \& of course TIC! Some almost nightly. Fair MM on 10/13: KXRA on $f / \mathrm{c} 12: 32$ zood, KOMO-1000 Seattle zood w/MOR 1:05, KOYN Billinss, Mont. Ihw.D believed to be one w/CW IDs as per r/c list, KNR also returning early this year. CKDA B.C. w/spots 1:03 also. QSLs slow: v/q- KOMO KKHI WHK wIB. v/1- KrYo. States now $43 / 40$. Looks like a cood season ahead: Good. DX to all.


This month's chenge of format was the brainstorm of Gene Allen. He thought an overall ranking of the DXers, based on rankings in total veries and total countries, would be of interest. Was fun compliing, but also somewhat of
a nightmare, for your editor, hil ( $t$ ) indicates a tie for that ranking.
Members marked (*) need to bring their standings up to date. Next month,
we will run "heard totals" as well as Asiatic totals. 73.


