



# DX News

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A last minute phone call from Cliff Reno informs us that the time for the WGSN test has been extended at least 15 and perhaps 30 minutes beyond that originally scheduled - this in order to avoid QRM from CBX which should go off at 0305 EST. The station wants calls from distant listeners; phone number is 516-423-7340.

Loop kits will become available as soon as the last of the component parts that we've ordered are delivered. We can give no firm dates naturally but we're working to get them together as quickly as possible. Information on the exact prices and times of availability will appear here in DX News as soon as possible; members who've already contacted us will receive personal notification slightly in advance of bulletin time.

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Ten pairs of 2N4416 FET's have already been sold through HQ; if you're going ahead with the loop without waiting for the kits, you can order the FET's direct from HQ at a considerable savings over what you'll have to pay commercially.

\*\*\*\*\*

IRCA has agreed to join in the "Friendly DX Contest" pending approval of their Contest Chairman, writes Mike Northam, IRCA President... Special thanks go to Russ Edmunds for helping out with publication last week... Please send newspaper clippings directly to Paul Gough - not to HQ!

GPN

October 18, 1989

## SPECIALS

		Kc/s	Location	Power	Time	Notes
Mon. Oct. 27	W C M S	1050	Norfolk, Virginia	5,000	12:01 - 1:00	IRCA
27	W G S M	740	Huntington, New York	5,000	2:30 - 3:00	NRC
27	W C I R	1070	Beckley, West Virginia	10,000	3:00 - 5:00	IRCA
Mon. Nov. 10	W B R G	1050	Lynchburg, Virginia	1,000	3:00 - 3:30	IRCA
Mon. Dec. 1	W C V R	1320	Randolph, Vermont	1,000	1:00 - 2:00	NRC/RLA
15	W C V R	1320	Randolph, Vermont	1,000	1:00 - 2:00	NRC/RLA

WGSM-740, see last week's DX NEWS for details. Reports to Don Huber, WGSM, 9 Aquaview Court, Huntington, New York - 11743. CLIFF RENO.

WCMS-1050. They will be extending their regular frequency check, for a test, & the music will be country/western. If they stay on past 1:05, then they'll be clear of WHN, New York. Reports to Mr. Leo Higgins, C.E., WCMS, 5600 Curlew Drive - Norfolk, Virginia - 23502. JIM HALL, IRCA.

WCIR-1070. WCIR has just switched from 1060 to 1070 kc/s., and will be making this Proof of Performance Test, using plenty of IDs and country/western music. They also plan to test their 1-kw. auxiliary transmitter during the course of this time. Reports go to Mr. Roger L. Fox, C.E., WCIR, Box 1063, Beckley, West Virginia, 25801. JERRY ROBERTSON, IRCA.

## International TA Test

Most NRC members are by now well aware of the fact that there is a very close relationship between "auroral/geomagnetic activity" and certain types of MW DX reception. While the effect of the Aurora Borealis on very high frequency (VHF) signals has long been known (hams have been bouncing signals off the aurora for years), it's only been in the last few years that the connection between MW reception and the aurora has been studied. Recent scientific studies have shown that high-latitude propagation of MW signals is very strongly influenced by the daily location and character of the belt of ionization absorption in the "auroral zone"; because of the skewed nature of these auroral regions, their effect is felt most strongly on Transatlantic paths. Depending upon how you wish to look at it, East Coast DX'ers are in an ideal geographical location to study the effects of the aurora on MW reception - but by the same token we're also the first and worst to be bothered when the aurora does kick up!

Those who've gotten "How to Listen to the World" or who happened to attend the technical sessions in St. Louis have got a rough idea of what actually happens when the aurora becomes active; the rest will have to wait until the main article on aurora appears here in DX News in an issue or two. But even if it's all still a mystery to you, we'd like to invite you to help us gather some scientific data which will hopefully permit us to make a highly detailed map of the exact location of the auroral zones on one particular night: November 7th - 8th.

The idea is to have as many listeners in North America and Europe on the lookout for TA signals as possible; on the basis of who hears what (and, equally important, which of the usual TA's are missing) we hope to be able to determine exactly where the auroral zones were located on that particular night. Then, by comparing the receptions with scientific measurements made that day by ground and satellite based geophysical equipment, we'll be able to correlate many actual receptions with various scientific measurements. The eventual outcome will hopefully be a set of auroral region maps which would permit the MW DX'er to predict TA reception (or lack thereof) on the basis of GEO broadcasts from WWV.

What we wish to do on the test date is just to have you listen from sunset (local) onward and let us know which TA's you happen to hear that night and some idea of whether reception for each station is "normal", "better", or "worse" than "usual". This is naturally highly subjective but all we are interested in at the moment is getting an idea of which paths are open and which are blocked on that particular night.

If we're in the recovery phase from an auroral disturbance that night and all that's heard in North America is Dakar, the absence of usual TA's is of interest. The major MW clubs of Europe - Arctic and the MW Circle in England - will all be listening especially for North Americans on that night and combining their data with that gathered in North America should give some most interesting results. Every member who contributes his observations of TA signals for that particular night will be sent a copy of the tabulated results and a preliminary report for the experiment; eventually a final version will appear here in DX News.

Please go out of your way to make special note of TA receptions on the test night; the more observations we get the more meaningful the results will be. We'll give more information, including a list of AN TA's to watch for specially next issue. Please set this night aside to help us with this experiment.

GPN

To NRCer Mike Northan, who was married this past August. May the two lovebirds enjoy many many years of wedded bliss!

OFF- 1450 W O L SAs & MAs, maybe  
no longer AS.

1170 U W L E Cornwall, New York  
(OC & IDs de-act'd)

It's still a long way off, but there will be the annual N.Y.C.-W.V. area IRC clan get-together, at DAVE BOSS' place, 7 Eler Drive, Middletown, New Jersey, on Saturday, November 29, starting at Noon, and running until everyone runs out of gas and gab. All are invited! Travel details on request from Dave.

Just because we're not as wide as we were, don't think we're narrow minded! The newest format looks great, and we are very happy with this latest triumph in Watertown! Now- let's all get into print here in DX NEWS - support the various sections, and follow the editors' specifications, and let's all have the merriest of DX seasons! Brooklyn Beatline for Musings is every MONDAY. And we ask you all please, no double-space - leave a line between lines, that is - some of you all have been forgetting this detail lately - it is much easier on these old eyes when you do remember to double-space. Thank you! Not too big a Musings section this week - just as well, as your Editor is all wrapped up in his MEES, including having a 310 love ticket for Gene & first!

JERRY DEARER is still on the lookout for CPomen - why not YOU? Write to him today, at WHOR, Youngstown, Ohio, 44505. This is one way ANYBODY can help his club, so why not try your hand at it? Perhaps, you might have success in getting our own locals and semi-locals to MEET, by asking them - THE PERSON! Try!

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## CONTEST!!

\* \* \* \* \*



- (0) FDXC :: FRIENDLY DX CONTEST
- (1) Any NRC or IRCA member may enter.
- (2) FDXC begins 0007 EST, October 22, 1969
- (3) FDXC ends 0011 EST, May 28, 1970
- (4) Entry fee: 50¢
- (5) Enter on or before November 1, 1969. After this date only new club members may enter FDXC.
- (6) There will be four classes of entrants, two from each club: (D denotes Domestic and F denotes Foreign) (I) NRC\*D (II) IRCA\*D (III) NRC\*F and (IV) IRCA\*F. If you belong to only one club, then you may enter either the D or F (or both) contest classifications for your club. If you belong to both the IRCA and the NRC and (i) if you enter only one classification (D or F), then you must declare which club you wish to be affiliated with and (ii) if you enter both contest divisions (D and F), then you must enter one as NRC and the other as IRCA. Contestants must specify these choices upon entry and these choices will remain in effect until the end of FDXC.
- (7) Club scores in each division will be the average score (e.g. in NRC\*F, the sum of all individual scores of NRC\*F entrants divided by the number of NRC\*F entrants). A club's TOTAL score will be the sum of the scores from both divisions (D and F) divided by two. Awards will be based upon TOTAL Club scores. The club with the highest total score will be declared winner and will be awarded a plaque or trophy. (This award will remain with the winning club until another FDXC--with possibly different rules etc.--is declared between both clubs in some future year.) Four individual awards will be offered: First place awards to the highest individual scores in the Domestic and Foreign divisions of the winning club and second place awards to the highest individual scores in the D and F divisions of the second place club. Standings will be published periodically in both DXN and DXM and final FDXC results will be announced at the 1970 club conventions.
- (8) RULES: All reports to the FDXC manager MUST be made on a special report form--available free to each entrant. For the Domestic division these log forms list in a vertical column each 10 khz channel from 540 to 1600 and have sufficient room to list Call, Location, Date and Time (use EST!) beside each frequency. For the Foreign division the log forms list the frequency blocks 535-599 khz, 600-699 khz, 700-799 khz, ..., 1500-1605 khz with five blank lines (for entering 5 loggings) under each frequency block. Enter Call(if any), Frequency, Location, Date and Time (EST). When an FDXC form is filled by a contestant it should be dated with the date of the last logging and mailed promptly to the contest manager for record keeping. This date of the last logging on one FDXC form serves as the starting date for the next FDXC form which will be mailed by the contest manager to the contestant; no logging prior to the date listed by the contest manager on a FDXC form may be logged on that FDXC form. After November 1, 1969 all first FDXC forms will bear the date on which the contestants fee and entry reaches the contest manager. On or before November 1, 1969, all first FDXC

forms will be dated October 22, 1969. All entrants should mail their last FDXC forms to the contest manager on or after May 28, 1970 without penalty for omitted or skipped log entries. All forms must be received on or before June 15, 1970 for final scoring by the contest manager. Entrants in the Domestic divisions are to log only US and Canadian stations and entrants in the Foreign divisions are to log only non-US and non-Canadian stations.

- (9) SCORING: No station may be logged more than once during the entire contest by the same individual. For the Domestic division, each station logged counts one point except that any station logged between 1000 and 1401 local time counts two points. All foreign division loggings count three points. Any FDXC form which is not completely filled will receive a deduction of five points for each frequency or line skipped or omitted. Any FDXC form completely filled will receive an additional bonus of 25 points (domestic) and 50 points (foreign). No credit will be given for verifications in this particular contest. Only positively identified loggings may be claimed--you're on your HONOR!!
- (10) Contest Manager: FISH (Dave Fischer), Box 6256, Lincoln, Nebraska, Zip 68506. Decision of the contest manager is final regarding any debated issue of the FDXC. To enter, send entry fee along with make and model of receiver(s), type of antenna(s) and division entry/entries desired: NRC\*D, NRC\*F, IRCA\*D or IRCA\*F.

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### LAST MINUTE FLASH!

- 893.72 Canary Islands. EFJ57, Radio Juventud de Canarias, logged with remarkably good signals on this channel 1735-1903 s/off on 10/15. This station, originally reported on 895 in the September 3rd issue of IDXD, is the first split channel Canary Islands station to be definitely logged in North America in a very long time. Typical Iberian programming with lots of Spanish music and opera; both male and female announcers; long sign off format complete with chimes, hymn, anthem, etc. at 1900. Modulation on mike a bit shallow but overall quality quite good. This one is located quite far to the South and may be well heard even when auroral activity is relatively high and most other TA's are absent. If you need this country, give this one a good try. (Nelson, Mass.)

# DOMESTIC DX DIGEST

Randall Kane  
130 Beacon St. Box  
Boston, Mass. 02116



*the nightmare... is the right time...*

- 620 WSUN-Fla In o/WTMJ after WVNJ s/off 0000 10/6. (Russ Edmunds)
- 680 KOMW-Wash DX not heard. (Glenn Hauser, Lowry AFB, Colo)
- 860 WAMO-Pa Hrd w/ET-mx 10/6 0040-0100. (Edmunds, NJ)
- WEVA-Va R/c hrd 10/6 0045. (Edmunds)
- 910 KBGN-Idaho DX 10/6 0402 w/gospel & IDs, good. (Hauser)
- 950 KMER-Wyo DX not hrd 10/6 as sked in IRCA only. (Hauser, Colo)  
Listed in DX News for 10/13... (Lk)
- 1070 KNX-Cal Very strong 0010 10/13, in for over an hour. (Mark Katz, Arlington, Mass) Welcome to DDXD, Mark! (Lk)
- 1240 KBYM-Mont DX 10/6 0333 ID & code number, IRCA plugs (It certainly does! Lk), 0341 Col. Bogey, Kersten on tape, I assume; beautiful. (Hauser, Colo)
- 1550 WVAB-Va DX hrd 0312-0325 10/13 w/recorded mx & anncts. (Katz)  
Cf tx listed in 9/27 DX Calendar. (Lk)

## a daytime tip

- \* 880 KRVN-Neb 8/25 1545 ID for field strength measure, OCs except for this at quarter-hour. Hrd in Vona, Colo. (Hauser)

## OTHER STUFF:

- + 570 KVI-Wash Is AN6, SP 0500-0900 Sun. (Bart Cronin, Seattle, Wash) Good luck and congratulations, OM! (Lk)
- 650 KORL-Hawaii S/off 0600. (Edmunds) Whence info? Per Wood in 5/10 IDXD, is AN6 w/SP MM 0500-0900, 0400-0800 during DST.
- + 710 KIRO-Wash Generally NSP, off occ MM, tx irreg. (Cronin, Wash)
- + 790 KONA-Hawaii Will return as KKON. (Edmunds, NJ)
- + 850 KTAC-Wash Is NSP. (Cronin, Wash)
- + 950 KJR-Wash NSP, non-DA fulltime. (Bart) Not U2 as listed? (Lk)
- +1000 KOMO-Wash AN6, SP 0300-0800 MM. (Cronin)
- +1090 KING-Wash AN6, SP 0400-0800 MM. (Cronin)
- \*1150 WTMP-Fla Due to a fire in mid-Sept, stn has been on w/AXR of 1000w & will continue til repairs complete. Fire was arson, totalled main XR. (Edmunds, NJ)
- +1330 WDAL-Minn CP for 5000w. (Edmunds)
- +1340 WEKV-Ky Is NSP. (Edmunds, NJ)
- +1360 KMO-Wash AN5, SP 0300-0730 Sat & Sun. (Bart)
- +1380 WLOS-NC Granted WKFE. (Russ)
- +1400 KQNS-Cal CP for 1000/250 U1. (Edmunds)
- +1470 WAAG-Ga Granted WBIT. (Russ)
- +1480 WHEB-Conn Granted WKND. (Same)
- + CP-Tenn Waynesboro 38485; 1000 D1, Box 395. (RJE)
- +1520 CP-NM Albuquerque 85701; 500 U1, 48 E. Broadway. (RJE)
- +1530 WOBR-NC Is call for Wanchese CP. (Edmunds)
- + WPIC-Va Is call for Collinsville CP. (Russ)
- +1540 WGLR-Tenn Is call for Hohenwald CP. (RJE)
- + KPEP-Wash 0900-0500 Mon-Sat, 0900-0300 Sun. (Bart)
- +1570 KACE-Cal Is on w/5000 D3. (Edmunds, NJ)
- + WIPP-Ind CP for 500w. (Russell)
- +1590 KEND-Wash 0900-0300 Mon-Sat, LSR-0300 Sun (Oct 3R is 0930, Nov 1015). They do this to avoid using separate night facilities on Bainbridge I., 6 mi across the water from Seattle. (Cronin, Wash)



ALL CLAP FOR GI FOX!

RIGHT NOW! 73, really

# IDXD Monitor Reports

Members' Loggings  
Bob Foxworth, GPO Box 2111  
New York, N.Y. 10001



Telephone Tip No.: 212-562-0844. All Times in DX News are Eastern Standard.

- 557 Asian RSFSR. Unknown location, relaying Moscow Chinese Svce 1100 10/4 in standard Chinese. (Wood, Kailua, Hawaii)
- 558 China. Peking, 1030 10/4 in Uighur or very similar. (Wood, Hawaii)
- 570 Venezuela. YVLX, Caracas from 2320-0000 s/off, "LA mx", believe pgm was "Canciones de Venezuela"; ID as Radio Rumbos, hvy SS QRM 10/4 (Feidt, Md)
- 570 Japan. JOIK, Sapporo; s/off format is as follows: 10/4 1000 time signal and NA "Kimi Goyo", 1001 male anncr: "... Sapporo desu, JOIK." Interval signal, musical box melody, played several times over. Off 1001½. Each stn appears to cut audio and/or carrier after varying amounts of the final IS, a minimum of one playing and a maximum noted of 5 minutes. This is standard for NHK first network. (Wood, Hawaii)
- 600 Puerto Rico. WAEL Mayagüez hrd w/soccer match, all alone 2340 9/20 with CFCF off the air. (W Rogers, Nashua, N.H.)
- 611 Kirghiz SSR. Frunze at 1030 10/4 very good with Kirghiz talk and singing unmistakably Central Asian. (Wood, Hawaii)
- 620 Dom. Rep. HISD Santo Domingo dominating here 1815-1835 with nx and commentary; SS, ID at 1830 10/7. (Bill Feidt, Md.)
- 650 Mexico. XETNT, Los Mochis believed the one 0803-0810 10/2 w/mention of Los Mochis, faded quickly. (Pejza, Calif.)
- 652a Mexico. XE-- with La Hora Nacional 10/5, cut power at end of pgm w/out a local ID; 2310-0000, had poor modulation. (Pejza, Calif.) (as below)
- 655 North Korea. Pyongyang had to be the one hrd w/Oriental lang 0803 10/2.
- 660 Alaska. KFAR all alone 0130-0145 10/6, gone by 0200 as CJVI in B.C. had also dropped off 20 db. My 2nd Alaskan here this season. (Murley, Cal.)
- 725 No. Korea. Kim-chaek probably the one vy weak 0825 10/2. (Pejza, Cal.)
- 740 Colombia. HJHB Ecos del Pasto weak u/CMJL 0012 10/6. (Edmunds, NJ)
- 765 El Salvador. YSKL San Salvador is the stn here, exc 10/4 2350-0010. ID is "Radio Cadena K-L" or just "K-L" (kah-ellay) (Merriman, Fairfax, Va.)
- 770 Cuba. VdC ending 0526 MM 10/6, beginning Rebelde/Oriente/ICR; gave stn list but didn't catch the one for 770. (Hauser, Denver, Col.)
- 810 P.Rico. WKVM even but separable WGY 2135 10/7. (Rogers, NH)
- 823 Guatemala. TGTO Radio Internacional noted here 2355 10/6, exc signal, several ID's heard. (Merriman, Va.)
- 840 unID. LA here w/nx in Portuguese 0129 9/14 during a deep fade by HJBI; are any Brazilians this freq ANING these days? (Scrimgeour, Toronto)
- 840 So. Korea. HLKY probably the one (acc to DF) very poor 0836 10/2 (Pejza)
- 840 El Salvador. YSF must be s/off 0000 now on occasion. Was even w/regular HJBI w/WHAS looped 2330 10/1. I assume CMCH, Cuba to be AN now, dominant 0200-0240 10/5. (Murley, Cal.) (Are those the correct calls here now? hi)
- 854 Peru. Radio Nacional del Peru, Lima logged again 10/7 and 8. Fantastic sig, best ever hrd from this one. Four clear IDs hrd in space of 2 minutes at appx. 0000. (Merriman, Va.)
- 860 Mexico. Radio Universidad, XEUN hrd o/u several domestic ETers (WAMO, WEVA) 0030 and later, 10/6. (Edmunds, Wayne, NJ)
- 870 Ecuador. Radio Cristal, Guayaquil ID in passing 0231 SM 10/5. (Hauser, Col.)
- 877 No. Korea. Wonsan probably the carrier 0720 9/29. (Pejza, Calif.) (Father Jack, how do you know QTH of this and 725 item?-Ed.)
- 880 Guatemala. TGJ, Radio Nuevo Mundo w/"Almanacque Musical" s-9 plus 10 for Cou. 21 in NJ, exc copy, tape made on 10/6 0035-0040. (Edmunds, NJ)
- 890 So. Korea. HLKB, Pusan 1027 10/4 in Japanese, list freqs, call letters, 1028 So. Korean nat'l anthem, 1029 off. So...hearing Japanese on 890 does not necessarily mean that you have hrd JOHK. (Wood, Hawaii) (Very good example, I feel, of the necessity for positive IDs on these UFO's, etc-Ed.)
- 894 Canary Islands. 10 minute flash - see page 5.

- 890 Indta. VUJ, Jullundur 10/4 1030 time signal and into EE nx. Good, and in clear after HLKB s/off; // other outlets 1030; own pgmg 1045. New. (Wood)
- 930 Montserrat. Radio Antillas from 2245 on exceptional SS evening of 10/4 w/ pop-mx pgm in SS. ID 2259 was "aquí Radio Antillas desde Montserrat, Antillas Británicas." Quite strong and dominated channel well. New. (Feidt) Radio Antillas logged 10/4 1840-1900, way atop most of the time during this period. Rock mx in EE w/FF ancmts. Clear ID as Radio Antillas at 1900. (Merriman, Va.) (Nice catch on a crowded channel, tnx Auroral 'cx-Ed.)
- 940 Colombia. HJGB, Radio Eco, Cali hrd/taped 2251-2257 10/7. (Rogers, NH)
- 960 Colombia. HJHN, Barranquilla 0030-0040 strong and atop here w/SS mx and frequent IDs as "Radio Sutatenza" by male-female ancrs 10/5. (Feidt, Md.) R. Sutatenza loud and atop 10/4 2338 check to ID hrd 0043, interviews & commentary in SS. (Scrimgeour, Toronto, Ont.)
- 962 unID. TA here, fairly strong het but no audio while other TA's in well, 2345 and later 9/19 perhaps this is Tunisia? (Gray Scrimgeour, Ont.)
- 1000 Nicaragua. Radio Mil, Managua YNT 2145-2155 10/7, clear ID taped. (Rogers)
- 1020 Venezuela. YVRS, Radio Margarita, La Asuncion exc 10/5 1900-1930. Upbeat LA mx, as many as 6 IDs between each record. (Wow!-Ed.) Listened for almost a half-hour and noted only 1 slight fade in that period. (Merriman, Va)
- 1020 India. VUD, Delhi B. 1010 10/4 w/Indian mx, 1030 EE nx and continued in EE 1045. Very good despite Peking; new, reported. (Wood, Hawaii) (as is )
- 1020 Tonga. ZCO, Nuku'alofa. 0415 10/6 w/pop records, first time hrd since the beginning of Sept., a sign of a sudden swing to southerly, summer-like cx.
- 1025 Colombia. HJER 0127 10/6 w/many ancns, RCN pgmg. (Kilroy, D.C.)
- 1035 Haiti. Evangelistic Voice, EE from 2055 10/3 until earlier s/off at 2104 and made mention of only 1035 as a MW freq for them. (Hauser, Col.)
- 1035 Nicaragua. Radio Central, Chinandega, 2300 10/1 in SS, Nic mentioned, a het perhaps from 4VE OC, 0026 10/2 TC and ID. (Hauser, Col.)
- 1040 Colombia. HJFV, Radio Tropical, Barranquilla, many IDs in promo, rhythmic mx 0227 SM 10/5. (Hauser, Col.)
- 1070 Kazakh SSR. Ust'-Kamenogorsk. Outstanding signal 1010 10/4, relaying news from Alma-Ata in Kazakh. A very impressive, stentorian-sounding language. (Wood, Hawaii) (By the way, Richard, Nat'l Geo map shows your logging of Uralsk, last week, as being in Europe..altho just barely, hi. -Ed.)
- 1079 unID. LA w/jazz, vocals w/SS ancncr hrd 9/24 from 2310, loops Caribbean but killed by WTIC slop when they pgm mx. (Scrim'g'r) (A Cuban reported here-Ed)
- 1160 Colombia. HJCK o/all 2300 10/1 w/nx, then cl mx. (Kilroy, D.C.)
- 1160 Colombia. Definite HJ-- here 0010-0025 10/5, typical Latin fare. Complete ID given 0025 but too far down into noise to copy. Finished w/NA at 0026. Who is this? (Bill Feidt, Md.)
- 1160.5a Colombia. Ondas del Cienaga Grande, Cienaga HJBL logged 2138-2302 s/off w/Colombian NA, good signal, het from 1160, reported. (ERCooper, N.Y.)
- 1180 Dom. Rep. HIBE Radio Mil u/WHAM w/ID 2244 9/22, very pleasant mx. (Gray Scrimgeour, Ont.) Radio Mil, Santo Domingo was good 10/4 1820-1835, nx w/ID between nx items as "Radio Mil, la Primera" (Merriman, Va.)
- \*\* 1187 Guatemala. Believe Radio Sonora, TGT on this freq now, logged 10/8 to s/off 2358. Was s-9 but no positive ID, altho hrd Guatemala. (Merriman, Va.) La Sonora in Guatemala City logged w/fine signal 10/8 2127-2217, is assigned 1180. (E.R.Cooper, N.Y.) (Was here last spring, may go to 1180 agn)
- 1190 Colombia. Radio Cordillera, Bogotá HJCV logged 0013-0036 9/29, WOWO off.
- 1192 unID. SS here w/s-7 signal 10/1, s/off 2302 w/Colombian NA, definitely was not R Cordillera, above. (1190 and this item from Ernie Cooper, N.Y.)
- 1200 Venezuela. YVOZ, Caracas appx 2220 10/4 w/SS mx, frequent IDs as "Radio Tiempo" and one of strongest LAs in here this eve and easily dominated others on freq. (Feidt, Md.) R. Tiempo loud at ID 2010 9/18. (Scrim'g'r)
- 1203.5 Costa Rica. TIQ logged in EE to 0102 s/off MM 10/6 and has slipped off assigned 1200 where they were hrd 9/22. They were easy then, they're a lead-pipe cinch now! (Cooper, N.Y.) (More this item next page)
- 1203.5 (cont'd) Radio Casino, Puerto Limon, C.R. logged w/decent signals the evenings of 10/4 and 10/5 from 2345. S/off 10/4 at 0102, all EE. (Scrim'g'r)
- Radio Casino hrd 0026-0100 s/off in EE, SS and EE mx. (Kilroy, D.C.)
- \*\* 1205 Colombia. Radio Internacional, assigned 1210, has slipped onto 1205 and has a good signal, logged 10/6 2203-2228, often repeated USA band selection, "High School Cadets" (ERCooper, N.Y.) (Your knowledge of obscure mx astounds me, hi-Ed.) unID HJ--, presumably HJEE hrd at 0001 s/off w/Colombian NA on 9/5, weak and in the noise. (Scrimgeour, Ont.) (10/5, no?)
- 1205 Sierra Leone. I assume this is the one with wierd IS on a flute or similar wind instrument 0055-0059, with 6 notes, one with a coloratura-type trill. Annncmts by a man and woman 0101, then faded out on me. (Cooper, N.Y.)
- Sierra Leone hrd w/Mormon Tabernacle Choir quite clearly 9/14 from 0106 to f/out at 0120. Checked, was // their SW outlet. (Scrimgeour, Ont.)
- 1205 France. ORTF, Bordeaux hrd 8/17 at 2300 for first time of season. Exc sig on 9/24 at 2320, only TA audible then (altho 737 made it in after CBL closedown; at 0021.) (Scrimgeour, Ont.)
- 1210 Venezuela. YVMN, Radio Coro 0515 10/7 "su emisora amiga, Radio Coro", nx. No. 12 from YV here. (Wood, Hawaii)
- 1280 Afghanistan. Pol-e-Chardi excellent at 1020 10/4, in Afghan-Persian. (Wood)
- 1280 P. Rico. WCMN, Arecibo. 0525 10/7, ID and local spots, all SS. KIT looped out. Second P.R. logging, after WMDD. (Wood, Hawaii)
- 1305 Cuba. One of the CM--'s now here, good nightly. Don't know who and could really care less, hi. (Merriman, Va.) (See item 1308 last issue-Ed.)
- 1368 unID. This appx freq noted many eves, easy-listening mx early and cl mx later in the eve, gal ancncr gives time between seln's but no ID hrd. I suspect this is a Cuban but not sure. (Merriman, Va.)
- 1375 Costa Rica. Noted 10/3 2230-0000, used "Radio Monumental" in every ID, typical LA pgmg, singing w/strings, alternating talkative male-female ancncr and ID 3 or 4 times/hr. From 2345-0000 they had EE pop-mx on a seemingly taped pgm sponsored by Canadian Pacific Airways; off at midnite w/short closing remarks in SS. (Brauner, Penna.) (Good to hear from you, Joe-Ed.)
- 1435 Neth. W. Indies. PJA5, Radio Kelkboom excellent level 2017-2030 in Dutch and SS w/SS mx. Aruba. (Kilroy, DC)
- 1515 Dom. Rep. HIBL Radio Pueblo, Santo Domingo exc several eves, particularly good 1935-1950 10/5. (Merriman, Va.)
- 1530 India. AIR, Muthura 1030 10/4 // others in North Regional Svce. Quite a good signal, remarkable for listed 1000 watts. India #9. (Wood, Hawaii)
- 1535 Colombia. La Voz del Petroleo, Barrancabermeja almost certainly the stn hrd here many evenings. So far, no trace of the 25 watt W.I.B.S. stn listed on this freq; still trying, hi. (Merriman, Va.)
- 1538 W. Germany. DLF, Mainflingen at 0010 w/nx in GG and quite good signal for a new one here on 9/29. (Feidt, Md.)
- 1540 Bahamas. ZNS-1, Nassau 0445 10/6 in Creole for Haitian residents of the Bahamas; 0500 ID as "ZNS-1 in Nassau, Bahamas" and into morning mx. Exc strength, like a local at times and remarkable for Cou. 63. KXEL was quite weak and easily looped out. A sign of summer-like cx. (Wood, Hawaii)
- 1542a Colombia. Radio Canoa, Turbaco HJBV probably the stn here many evenings, easy listening Latin mx, too much ZNS for ID so far. (Merriman) (note: JKC)
- 1550 Colombia. Mention of Bogotá hrd 0235 10/4, possibly HJZI. (Kilroy, DC)
- 1550 Colombia. HJAX hrd u/CBE 2250 10/4 and all alone by 0030 w/CBE off. ID at 0040, hrd city location "Barranquilla, Colombia". (Scrimgeour, Ont) Voz Porteña exc 2120 and on, 10/4. There's a bad het here but not sure if it's caused by HJAX or not. (Merriman, Va.)
- 1555 Colombia. Radio Espacial, Tulua HJLP exc several eves, hrd s/off with NA at 2000 10/5. (Merriman, Va.)
- 1562a Colombia. unID stn here, split off from Cuban 2340 10/1. (Kilroy, D.C.)
- (More of the World's Foremost MW DX Information is yours on the next page)

- 1565 unID. Hrd here several eves, good most of the evening 10/4. ID seemed to be Radio Sensacion so is probably HJZT in Manizales, listed on 1570. The WRTVH also lists a Radio Sensacion on 1560 in Quininde, Ecuador with 5 kW but I doubt this is the one. (Merriman, Va.)
- 1575 Colombia. La Voz del Banco, El Banco HJLC almost certainly the stn here, good 10/5, 1845 to 1900 s/off w/NA. I didn't hear the LV del Banco slogan, but did hear El Banco mentioned several times. (Merriman, Va.)

### Verification section

- 705 ST. VINCENT. V/q in for reception last Winter of British games (the W. Indies-Aust. cricket test matches-Ed.) on a MM w/WOR-710 silent. The card is postmarked in Grenada, and v/s is illegible. Address: Broadcasting House, Grenada, The West Indies. Card specifies St. Vincent-705 and gives power as 500 watts. (Ernie Cooper, N.Y.)
- 719 PORTUGAL. Norte I verified in 2 weeks with a nice QSL for taped report sent to Lisbon. This is a new card, a photo of sailing ship on the front overprinted in gold with Emissora Nacional and their logo. Text on reverse is all in Portuguese so I'd guess this is a new Home Service card. Maybe it will be easier to get veries from the Home Service stations now. (Merriman, Va.)
- 777 IRAN. Large, very detailed v/q from Radio Zahedan, totally specific with all details. From E. Golesorkhi, Director General, Radio Iran, Teheran. Also brochures, schedule. My best Asian and country #40 verified from Hawaii. (Wood, Hawaii)
- 811 URUGUAY. CX-14, El Espectador, Montevideo. Vaguely worded card and a nice pennant from Hector Amengual, Presidente. Uruguay verie #4 which gives me 100% verification of stations hrd in Uruguay, my best record from a Latin country. (Wood, Hawaii) (Ed. note: Richard hasn't been hearing the same CX's we hear here in the ECNA, hi...ours don't verie!)
- 1196 COLOMBIA. HJCV sent v/l in SS with pennant of Todelar, from "Radio Cordillera, Ltda.", Carrera 5e No. 18-84, Apto. Aereo 84-67, Bogotá, Colombia. No. 29 from that country. (Ernie Cooper, N.Y.)
- 1190 MEXICO. XEWK, Cadena Radio Guadalajara, S.A., Guadalajara, Jal. Extremely specific v/q and v/l with all details from Pedro Lomeli Negrete. (Wood)
- 1460 COLOMBIA. Radio Nuevo Continente, Bogotá sent v/l in EE from Rev. Sixto M. Lopez, G.M. and enclosed 2 postcards. (Wood, Hawaii)
- 1540 BAHAMAS. Leslie H. Cartwright, CE sent verie form in 10 months, did not specify whether 1240 or 1540. (Dave Allaway, N.Y.)
- 1505 ANGUILLA. As shown elsewhere in this issue, if the photography took, the first information regarding expanded broadcasting hours for this station on Alex Bowab's verie from this station...which was hand-delivered to your Editor 10/12 while Alex was in the Big City on leave. In case it didn't take, we'll repeat the pertinent info here. Power is 500 watts into a "tee" antenna. S/on is presently 0530 EST 7 days a week and s/off at 2100, likewise 7 days per week. Local islanders do all the announcing and will soon take operating control of the station after the 2 British civilians on the staff train the crew.
- We have another report on verification of Radio Anguilla from Relfe Luton of Elizabeth City, N.C., an NRC "old-timer" who reports receiving verification of Radio Anguilla 9/27 for reception on 1505 kHz, 1835-1900 on August 24. Relfe also includes their pgm sked, but it was made obsolete 9/29 when the pgm sked shown above went into effect.

We had to omit and/or hold back for a week, quite a bit of info, and as (1) much of it was redundant, inspecific or dealt with easily logged, common stations, and (2) my time is fairly limited of late, I'm afraid I'll have to be a bit more choosy than I'd like in editing. I appreciate reports from all you guys but it's getting tight just now, so if yours didn't appear, pls understand,

### HOW TO LIVE WITH A BUDGET RECEIVER

by Russell J. Edmunds

Perhaps the initial consideration herein should be to define the term, "budget receiver". Rather loosely, ~~any~~ receiver costing less than \$250, list new, should be categorized as a budget receiver. No doubt this will come as something of a shock to a good many DX'ers who feel that they have a perfectly good set for which they paid far less, and likewise to those who can't even think of spending that much. All generalities, of course, have their exceptions, but, on the whole, this one stands up.

Thus, the category of budget receivers includes such modern-day wonders as the Hammarlund HQ-100 & HQ-200; the Hallicrafters SX-99, SX-100 and equivalents; the Drake 2C; all Knight models, and the least expensive models of several other manufacturers. It also includes some 99% of all transistor receivers commercially available, and obviously, many other types of radios ranging from All American Fives to vintage console models and hi-fi types.

While it is entirely possible to obtain really good results from a budget receiver, it isn't likely unless you perform several modifications. This is not to say that you can't be perfectly satisfied with one, either. The truth of the matter is that you simply can't expect consistently above-average results (comparatively speaking) without an above-average receiver. The problem is twofold, in that unlike budget receivers, which are quite plentiful, there really aren't too many good, commercially produced communications receivers which any more than adequately cover the Broadcast Band, and, unlike the budget receivers again, they're EXPENSIVE.

Therefore, many DX'ers conclude that there is really no solution to the problem. Happily, however, there ~~are~~ several things a DX'er can do to improve the performance of his receiver so that he can at least achieve a reasonable compromise between the budget receiver and one costing several hundred dollars. The additions, modifications, and techniques involved in improving receiver performance are many and varied, therefore, to avoid confusion, we will categorize them according to their function in the overall DX picture.

#### I. SENSITIVITY

The sensitivity of a receiver, that is to say, its ability to receive DX stations of low powers and at great distances, is perhaps its most important aspect for the DX'er. The unfortunate truth is, however, that there is not much one can do to improve upon that sensitivity -- either it's there, or it isn't.

The most useful way to maintain the optimum sensitivity of a receiver is to vigilantly weed out weak tubes, with special attention to the RF area, where they will do the most damage. It is also advisable to replace such hot-running tubes as 6SK7 or 12SK7 with a cooler substitute, such as 6SG7 or 12SG7. This will help to reduce signal loss in the RF stage. Likewise, weak or old bypass or filter capacitors may be contributing to RF signal loss. These should be rechecked carefully, and replaced if necessary prior to each DX season.

Still another precaution is to see that the receiver is properly aligned. This is, of course, primarily true only in communications receivers, although table radios have been known to drift far out of line. The practice of having a receiver aligned before every DX season may seem expensive, but it is most assuredly worthwhile.

In the All-American Five, or common table radio, there is yet another way to reduce RF signal loss. This is the replacement of the RF cathode resistor. In its place, insert a 5000 ohm potentiometer. This is used to vary the resistance for peak signal strength. In general, you will find that very little resistance is required; but on strong signals, cross-modulation may occur, which will necessitate additional resistance in order to remove it.

Assuming that the lack of sensitivity doesn't originate in the RF section, or that it has been remedied already, the only other place to effectively attack the problem is in the antenna system and its tuning circuit. This is generally true in all receivers, as the manufacturer simply cannot possibly compensate for all of the possible antenna systems which might be employed with any given receiver, and therefore, a mismatch is quite likely to occur. The answer to this problem is to construct an external antenna tuner to supplement the one already in the set if there is one, and to do the whole job itself if there isn't. Antenna tuners are mostly simple inductance-capacitance circuits, and therefore are not difficult to build. For a comprehensive discussion of several different types of antenna tuners, the reader is referred to the article, "Antenna Tuning Devices for the Longwire on the Broadcast Band", *DX News*, Vol. 37, Number 1, Sept. 13, 1969.

Since it's no secret that the longwire antenna is not the best of all possible antennas, it will probably come as no surprise that the surest way to add to the sensitivity of any receiver, be it budget or otherwise, is the use of a loop antenna, with field effect transistor (FET) booster amplifier. Not only will the loop provide greatly increased sensitivity, but it will enable the DX'er to effect direction-finding and mulling of unwanted signals as well. A detailed analysis of the FET loop and its construction may be found in the article, "FET Altazimuth Loop Antenna", Volume 36, Number 34, Aug. 23, 1969.

## II. SELECTIVITY

Selectivity, or the ability of the receiver to distinguish between signals on adjacent frequencies, is, happily, an aspect of reception which can be significantly improved, although some of the construction involved is by no means simple.

While a certain amount of selectivity is gained through the use of an antenna tuner, due to its selective peaking of the signal, the overall increase is still minimal by comparison with that gained by other methods. One of the simplest and most effective ways to increase selectivity is the addition of an external Q-Multiplier. This piece of equipment will do wonders for the more inexpensive sets, and will cause noticeable improvement even in sets which already have an internal Q-Multiplier. In a communications receiver, the installation is quite simple, as the directions for coupling are furnished with the unit. Also, the Q-Multiplier draws its power from the set when used with a communications receiver.

In All American Fives or other inexpensive receivers, a separate power supply must be built. Be forewarned, however, that unless properly shielded, this power supply will cause excessive amounts of NOISE. It is best to use a metal chassis, and ground it well, in addition to using shielded coax wherever possible, both within and without the unit. One of the best external Q-Multipliers commercially available is the Heath QF-1, which, after the DX'er has become accomplished in its intricacies, will be an invaluable asset. A further discussion of the aforementioned noise problem follows in Section III.

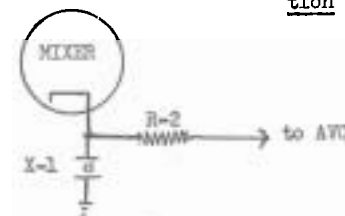
Still another means of improving receiver selectivity is the construction of a crystal filter. A simple circuit for such an installation is shown below. This filter will produce best results when used with a receiver without a Q-Multiplier, although it is extremely handy in sets which do have a Q-Multiplier, be it internal or external.

Fig. 1-A: Before modification



to AVC

Fig. 1-B: After Modification



Construction is relatively simple. First, determine the IF (intermediate frequency) of the receiver. Generally, the figure will be 455 kHz., however in surplus receivers the figure may be different. Should you be unsure of the correct figure, it can be determined by tuning the receiver to 1000 kHz., and then bringing another receiver into close proximity with the first. Tune it in the vicinity of 1455 kHz., or 545 kHz.. If a hum, whistle, or other extraneous noise occurs at these two frequencies only, the IF is 455. If no noise is heard, simply tune across the band until you find two distinct noises, then subtract the lower from 1000, and subtract 1000 from the higher to derive the IF. If the noise is found at 1262 and 738 kHz., then the IF is 262 kHz.

After determining the IF, replace the cathode bias resistor and bypass capacitor, (C-1 & R-1 in diagram) with a substitute resistor (R-2) and the crystal (X-1) respectively. The crystal should be exactly equal to the IF of the receiver. This is CRITICAL. The value of the replacement resistor is another matter, however. Generally, the value should fall between 100,000 and 1,700,000 ohms, but that is a lot of territory. If the value substituted is too low, you get feedback, and if it is too high, sensitivity is the victim. The solution is to temporarily install a 1 meg-ohm potentiometer, adjusting it for the optimum value. If the resistance is too low even with the full 1 meg-ohm, tie a 1 meg-ohm fixed resistor in SERIES with the pot, and continue the same procedure, adding additional fixed resistors if necessary. When the optimum value is determined, measure the total resistance with an ohmmeter, and replace the temporary setup with a single fixed resistor of the value read from the meter. Of course, a decade box serves the purpose as well, and with less soldering.

The crystal acts as a very high value capacitor at its resonant frequency (455 kHz. or whatever), and as a very low value capacitor at all other frequencies. Should you desire a switch, simply leave the original circuit in the set, and break into the lead from the cathode to the capacitor, tie the lead to the pole and the capacitor and resistor to one position, and then add the filter components onto the other switch position. You may find that a touch-up of the IF will be necessary, as it may not be precisely 455.0 kHz.

Probably the best way to improve receiver selectivity is the use of mechanical filters. The primary function of the mechanical filter is to narrow the bandpass of the IF circuit to a point where the interference from adjacent channels will be negligible, while the audio will remain quite readable. This is in contrast to the Q-Multiplier, which may oscillate with strong adjacent signals; and to the crystal filter, which tends to reduce the readability of the audio portion of the signal. The illustration below, (Figure 2) depicts the comparative effects of a) the normal signal, b) the set with Q-Multiplier, c) the set with crystal filter, and d) the set with mechanical filter. In the case of both crystal and mechanical filters, more than one may be used to even further improve performance. Likewise, either type of filter may be used in conjunction with a Q-Multiplier as well. In the diagrams, we will consider only the individual effects of each. The curve representing

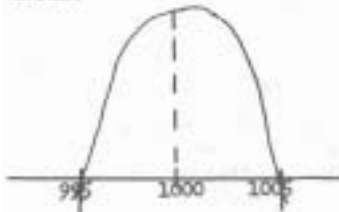
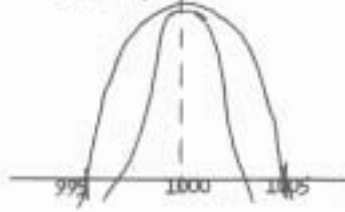
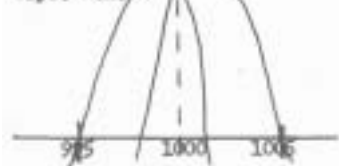
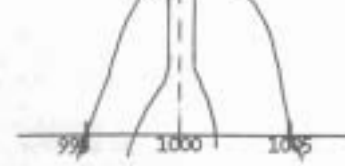
Fig. 2-A  
normalFig. 2-B  
Q-MultiplierFig. 2-C  
Cryst. Fil.

Fig. 2-D Mech. Fil.



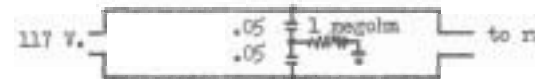
the normal signal before any modification is shown in each diagram as a means of comparison. For detailed information on mechanical filters, refer to the article "Installing Mechanical Filters in the HQ-180", *DX News* Volume 36, Number 22; and the article, "Single Sideband Reception on the Broadcast Band with Mechanical Filters" *DX News* Summer 1967, or available from HQ.

Noise, or, more precisely, the lack thereof, is another contributing factor to the retention of the DX'er's sanity, not to mention his hearing. It goes almost without saying, however, that as we increase sensitivity to signals, we also increase the sensitivity to noise. It is for this reason that the noise-limiter is becoming an increasingly important piece of equipment.

Many communications receivers are factory-equipped with noise limiters, but generally, these are simply ineffective as the noise level increases. There are several commercial noise limiting units available, among the best of which is the Sprague F-400, which will bring about a marked reduction in the amount of line and appliance noise coming into the set through its power line.

A simple noise limiter the DX'er can build himself is shown in the circuit diagram below. It functions as a bypass capacitor bled to ground, and is similar to many of the smaller and less expensive noise filters on the market today in radio repair shops and hardware stores.

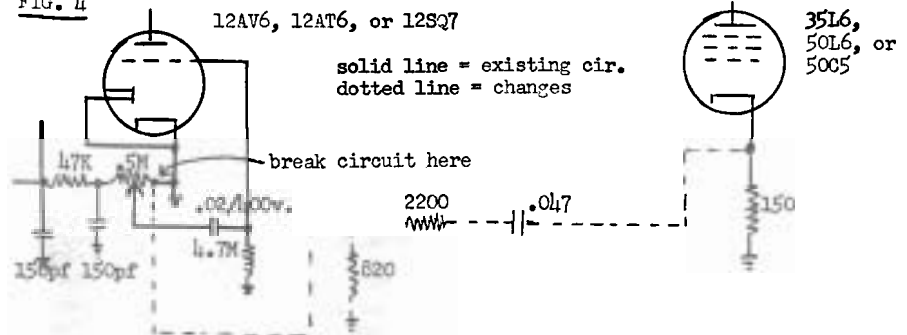
FIG. 3



The only other way to reduce the noise level is through the use of audio filters. Usually, audio filters are merely low-pass filters, which remove a good deal of the noise (and signal) above a certain fixed frequency. If you visualize the effects of an efficient tone control, you will have the concept of the audio filter. The low-pass filter acts very much the same as does a tone control when set for maximum bass response, while the high-pass filter is analogous to a tone control set for maximum treble. In reality, you are tuning out the high-frequency responses with the low-pass filter. Generally, a cut-off value of roughly 2300 kHz. is ideal for DX'ing purposes. In severe cases, two filters may be needed. They should be wired in SERIES with each other. A simple audio filter designed for use with communications receivers is discussed in the article, "Audio Filter", *DX News*, Vol. 36, # 21.

When the DX'er uses an All-American Five, he may wish to add a combination bass tone control and low-pass filter. The modification is extremely simple, and the circuit diagram appears below:

FIG. 4





In many cases, the noises encountered by the DX'er are not necessarily caused by high frequencies. On occasion, 60 cycle hum will appear. If this is the problem, it may be advantageous to obtain a 70 cycle ( 70 Hertz ) filter, and follow the same circuitry as for the external audio filter mentioned previously. Such a combination of both low- and high-pass filters should be sufficient to make almost any noise problem bearable. The exceptions fall primarily into two categories: TVI (television interference) and that caused by electronic (SCR) dimmers installed for house lighting. TVI appears as both loud, low-pitched hums, and higher-pitched squeals on split frequencies, often having a fairly wide bandwidth. A table of frequencies for expected TVI from both color and black-and-white sets is available from NRC headquarters. SCR dimmer noise is characterized by a loud, raucous hum appearing approximately every 15 kHz. through the entire band.

TVI can be cured by filtering the AC lines, both at the RX and the TV set; filtering the TV's antenna output; or by shielding the entire inside of the TV cabinet with either aluminum foil or window screen, and then grounding the shield. This should greatly reduce the amount of re-radiated RF which causes TVI. Dimmer noise can only be reduced at the source, where it is necessary to shield, and filter the entire dimming unit. As may be expected, this can prove to be difficult, however the most difficult part of it is to find the offending dimmer ( or dimmers ), as these noises are radiated through the power lines in such a way that the noise may carry several hundred yards from the source.

When dealing with less serious types of noise, particularly that from sideband splash, or just a general hash of noise from several audible stations on a given frequency, the audio filters are usually very helpful. One technique which can be used by the DX'er who tapes much of his DX is the re-recording of particularly noisy tapes through the same audio filters as are used with the set. This may still further attenuate the noise level, thereby making the resulting tape more readable.

#### IV. SPURIOUS SIGNALS

Another major drawback of the budget receiver is its frequent reception of spurious signals. These signals can be classed as images, spurious mixing responses, and harmonics. Harmonics appear on frequencies double the originating frequency, in other words, a station broadcasting on 620 kHz. might be audible on 1240 kHz. as well. Certain amounts of this type of radiation are almost unavoidably produced by the transmitter, and are generally allowed by FCC regulations, just as certain defined amounts of sideband splash are. The only other types of spurious signals not caused within the receiver are external mixing spurs, which will be discussed shortly, and those spurs appearing equidistant above and below the originating frequency, such as at 600 kHz. and at 640 kHz. from our station on 620 kHz. above. Here, again, the cause of the image is generally found at the transmitter.

External mixing spurs, however, are another matter, as they are caused by an object remote from both receiving and transmitting sites acting as a small transmitter and reradiating the signals of a given pair of stations on one or possibly two other frequencies. These are characterized by the position of the antenna tuning control on the receiver. External mixing spurs will be able to be peaked as if they were actually a station on the image frequency, whereas internal mixing spurs ( those caused within the receiver ) will peak at the antenna tuning position normally used for either of the originating frequencies. More detailed discussions of the causes and effects of the many different types of spurious signals can be found in the article "Spurious Signals",

DX NEWS , Vol. 36, No. 18 ; and the article , "Spurious Responses Revisited", in DX NEWS, Vol. 36, No. 34, and in "General Non-Linear Transfer Functions" in the same issue.

The best defense against spurious signals is a good offense, and there are several measures, which, if taken, will greatly reduce the problem caused by them. First is the alignment of the receiver prior to every DX season, with special attention to the mixer and antenna tuning sections. Second is the careful construction of the antenna system itself. Biggest offenders are loose or non-existent solder joints. So are places where, in wet weather, the antenna may become unintentionally grounded by leaves, branches, or ice. The external antenna tuner should be constructed in such a manner as to have no loose solder joints or possible shorts in it. The use of an external Q-Multiplier may also help to reduce the problem by allowing a degree of fine tuning which should enable the DX'er to tune around some of the spurious signals.

Another very effective means of reducing the spurious signal problem is the use of a loop antenna. The loop, because of its inductive coupling to the receiver, and its magnetic properties, not only will reduce the noise getting into the receiver, but will also reduce the possibility of images as it creates a very high-Q circuit, and an almost perfect antenna match.

In many receivers, poor tracking in the mixer stage may be causing spurious responses to be received. This results from a compromise in receiver manufacture, wherein the set is constructed to have as few controls as can be practical while not significantly reducing overall performance. The missing control is a mixer trimmer, which adds to the antenna trimmer, the degree of matching required to keep the receiver tracking properly. This particular receiver modification is too complicated to go into here, and is definitely on a project for the experienced electronic technician. Plans for it are available from NRC headquarters.

#### V. OTHER IMPROVEMENTS

There are, of course, many other interesting things one can do to a receiver to improve its performance. Many of these, like the mixer trimmer control mentioned above, are complicated projects. Others are not so complicated, but are limited in application to a few types of receivers. For instance, in some All-American Fives, an extra RF stage can be added, in order to provide greater sensitivity.

Perhaps the most widely known addition is that of a preselector, which improves overall sensitivity and selectivity. Such a preselector is commonly a military surplus receiver, which when coupled to the receiver in question, can be a very useful addition. The most common type is the BC-453, which is widely known as the "Q-5'er". Instructions for modification of the surplus rig, as well as its coupling to the DX'er's receiver, and a requisite power supply are available from many surplus electronics suppliers.

While only the more universally accepted and easy-to-construct additions and modifications for receivers have been discussed here, it is a foregone conclusion that they are more than enough to go a good way toward making the budget receiver a much more useful piece of equipment.

RICK EVANS - Box 1988 - Glen Park Station - Gary, Indiana - 46409  
 Good morning. Kindly note new address above. DX here this Summer was nil as all I had was a sleeping room. 9/5- WIP-610 Pa. in well enough for report which is rare. 10/1- WBRC-960 Ala. apparently AN 1:45-2:15 w/decent mx. WAND-1280 S.C. briefly 2:30 surprise as I am only about 1 1/2 miles from WACA-1270 towers. WSAZ-930 W.Va. no QRM from WKY, 3:30. WTIK-690 La. 3:30-3:55 when an SS took over. WRNL-910 Va. s/on-SSB very poor & not in very long. WOST-920 Ga. poor w/TT, perhaps a jammer, 4:36-4:45; WHYY-1470 W.Va. s/on 5am along w/WMBD-1470 s/on, bad combination. WVAK-1560 Ind. excellent w/c/w 5am (I understand Roger still needs them). WBTO-1600 Ind. fair 5:20-5:26. WNCM-1380 Ind. poor, 5:43. WSJC-810 Miss. fair o/u WMTS Tenn. 6-6:12. KDFN-1500 Mo. poor 6:20-6:30. WFWR-1090 Ind. 6:50-7. All times AM. Eight new stations that morning & ten reports to tupe. Sorry I couldn't be at ST. LOUIS but too busy moving stuff on Sat. evening. At least I kept the HQ-100. Batchelor pad all set up & ready to roll with the DX, as above shows. I am not sure of totals but I believe about 635 heard now. I am saddened by the death of Ralph Johanns. Is the NRC running a contest this year? Only verie since middle of June, WIP-610 v/1. 73. (I haven't heard a word on any contests, Rick - ERC)

ROGER W. WINSOR - 718 North Fremont Road - Valparaiso, Indiana - 46383  
 Well, I am finally back in these pages once again. I must be the last NRC member to say how great the Convention was in ST. LOUIS, but it really was. Let's hope there are more girl life guards in Paramus next year! DX is really practically nothing this Summer, as time really on FM, plus work. Ad-itions are 7/2- WAGO-690 Wis. on second day of RS 7:55-8:30, no verie yet. 8/3- KCCR-1240 S.D. weakly on r/c-IT 12:15-12:31. 8/26- WNTN-1550 on RLA TEST well, 1:57-2:30. 9/27- WIMP-810 Wis. finally 7:03-7:15 s/off w/c/w. 10/2- Nice catch in WIMA-1250 S.C. r/r 7:24-7:47 fadeout. Auroral CX prevalent, as has been the case lately. WSJC-810 Miss. has been noted almost every PM lately w/hard rock. They must have boosted their night power to 500w. I guess. Oh yes, I forgot 9/22, WMDA-990 Wisconsin Dells, on RS 6:55-7:15 s/off w/c/w also. Good signal too. Varies from the following: v/1- WKXY XEVIP KEZU WNTN WMDA. v/1-f/4p - WYNN KYMN KNAB KEHG KXRB. v/q- WVLK WEBC CHOW. v/r- WQWV & lastly a WRYT verie, which I had long forgotten about. Thanks, whoever was responsible for it. Varies now up to 064. During the Summer while driving home I have listened for TTs, etc. I did manage to pick up, on successive nights, WHYZ-1070 Greenville, S.C. w/ET/r/r one night, & then the next night, WNCOT Greenville N.C. w/TT to about 12:30am. Odd to get two stations with the same city name on same frequency two nights in a row. Don Eggert, your WEBR-1550 is WEVR. Rick Evans has notified me that as of 10/6 when he listened, KWK was AN MM, so there goes another good frequency. Other than this, I have nothing more to write about. Oh yes, while listening to WIMA they gave a promo for Big M at midnight, mentioned AN, etc., so sked info in NRC Log is now obsolete. If I get a verie from them, I'll pass along any info contained therein. 73.

KEN LYON - 9415 Goodrich Road - Clarence Center, New York - 14032  
 DX seems to be picking up lately. Recent DX includes: 9/16- WSOQ-122 a/off @ 6:15pm. 9/17- WINS-1560 s/on @ 5:30am w/500w. 9/22- WGMF-1500 heard @ 11:02-11:30pm w/r/c-IT, WRAN-1510 heard at 11:18-11:29pm w/ET/TT/mx o/u WMEX, which is a powerhouse here; WNAK-730 w/r/c-IT @ 11:34-11:45pm, first time I heard a clear ID on this one, WTCN-1240 w/t/c-IT @ 11:43-11:59pm, WALE-1400 in w/ET/TT /mx only briefly before fadeout w/WYSL nulled, WFEC-1400 f/c-IT w/WYSL nulled. 9/24- WRCP-1540 @ 5:45 s/on. 9/30- WFDR-1370 @ 6:47pm s/off very weak u/WSAY. Recent veries: WRAN (wrote "verified" on my report) WNAK WGMF finally after three reports, and WNTN for TEST. C U later.

RICHARD RICHMAN - 14 East Cheshire Place - Staten Island, New York - 10301  
 If I may quote a recent verie, all I can say is "WOWW"! A new province, a new country, & I'm not just whistling Dixie, when I say we had an Aurora. Yes, DX'r, there is a Virginia, but seven new catches there in just a few days is ridiculous. Some of the highlights follow: 9/21-22- S/off of WSME 1220 Me. C 6pm. The WQVR-1320 TEST in nicely 12:02-12:19am on 9/22. Big surprise in YNX-750, Nicaragua just before lam s/off, which came in well. A good signal on an SS-760 at the same time, but not IDed. To back up, a station was heard on 9/21 7:05-7:30pm, on 1500 u/WTOP w/NBC Monitor - had to be KSTP. Jerry Starr take note, WHOT heard w/rr on the "Big Al Show" @ 11:50pm, 9/22, w/WEVI off. 9/23 brought long-wanted WCLIS-1580 Ga. w/several ads for go-go girls at the Tower Club from 11:11pm on. 9/24- WHAI-1340 Pa. w/rr @ 11:45pm. 9/25 found WHHO-1320 N.Y. on ET @ 12:13am, tunein, well o/WJAS/WVQJ. Same day s/off of WTCW-1570 Md. @ 6:15pm. Also WSSB-1490 N.C. w/job opportunity offer @ 11:38pm. Then much-wanted CEK-540, Sask., province #7 heard w/"Theatre 10:30" @ 11:30pm, despotte much XEWA QRM. At SSS on 9/27, WPIB atop 1260. This Pa. station heard @ 6pm w/NX/WX. My WCIC verie told me the calls would soon change to WKGO, and they weren't kidding. WKGO-1560 Ga. heard testing after 12 9/28. 9/28 also saw the beginning of the Va. onslaught. It started w/WEER-1250 @ 6pm w/NX, s/off @ 6:15. WKCY-1300 o/u WFBR w/station promo @ 6:25pm. 9/29- WFAX-1220 s/off @ 6:14pm. Also WCHV-1260 @ 6:26 w/promo for ABC NX @ 6:30. However at that time, s/off of WJJJ was heard. One Pa. sneaked in w/the Va. catches, WCOY-1580 w/s/off @ 5:58pm 9/30. Then WRAD-1460 w/local ads @ 6:23pm. A fantastic signal was heard 10/1 from WESC-1550 S.C. 6:08-6:30pm w/c/w, & local ads. Below them the words "WAAAY degrees" were heard, for Ala. #3 heard. Other S.C.s were in w/best signals ever: WCSC WIMA. These CX also brought me WRDW-1480 Ga. w/local ads & Soul mx after 12 10/2. XEX heard w/SS same morning. Mexicans Cubans, R. Belize, PJB etc. are coming in w/signals that can only be described as beautiful, these first few days of Oct. ZNS is coming in all alone, & w/a good signal as early as 6:15pm these nights. Fla. is dominant on many frequencies, and UNID Sses. v/q- KSTP v/1- WBAX WOWW WQVR WWBZ WHHO WEER WAWZ WDYX. v/f- WCSH WSME. Is it true that graveyarders stay on full power on Halloween night? Hi. 73.

WILLIAM B. FEIDT - 9931 Glenn Dale Road - Lanham, Maryland - 20801  
 On 9/27 I attended a fine get-together at the Summer cottage of Hank Holbrook. There were a few BCE DXers in attendance & was very happy to meet Matt Zahner, Bill Bauer, neighbor Bill Higgs & of course Hank, among others. Also Alan Merriman made it up from Fairfax. We were all interested to cold beer & a listen to Hank's new HRO-500, which seems to be a real fine piece of equipment, although Hank said he had had image problems w/the preselect tune in strong signal areas at medium wave frequencies. Calibration was certainly fantastic w/accurate markings at every kc. We had TAs on 845 935 1554 1578 1586 in the early evening. Many thanks to Hank Holbrook for a fine session. To DX: 9/22- Clevedon-1457 booming in @ 12:30am. CSB4-1594 w/a real clear signal from 12:40-1:15am. 9/23- WKYB-1000 @ 6:15pm w/c/w & corny jokes atop here. WASP-1130 @ 6:22pm about even w/WNEW w/c/w. 9/24- Exceptionally strong signals from Rome-845 & Langenburg-1586 in the middle evening, but not much else noted. 9/28 - Usual TAs & hets on 1538 & 1602. 9/29- UNID LA-1145 noted this AM. WHLS-1450 Mich. s/off @ 12:05am right after WOL left the air. DLF-1538 Mainflingen @ 12:10am w/NX in GG for a new one. Monte Carlo-1466 w/a real good signal @ 12:30, but umm. 9/30- WKYB-1550 Tenn. noted w/s/off @ 6:44 w/SSB, very strong, but umm. WYNX-1550 @ 6:45 s/off & no anthem. WCPC-940 @ 6:50pm w/c/w, way o/everything else. WVOV-1000 @ 7pm w/rr & s/off w/abbreviated version of Dixie. WAPI-1070 Ala. @ 7:05pm w/Atlanta BB. Bottom dropped out @ 7:10 - must have changed antenna pattern. This evening marked the end of TA reception until this point - I got suspicious when I heard WCPC way atop everything on 940. Needless to say we must have had a real nice geomagnetic disturbance. 10/4- Exceptional SS opening this PM. UNID-1203 @ 10:10pm in SS. YVOZ-1200 Caracas ID as R. Tiempo, quite strong & made 1203 rough @ 10:20. UNID SS-1192 @ 10:30pm. R. Antillas-

-930 @ 10:45pm w/rr-SS atop this frequency. YVLX-570 w/SS mx & ID as R. Rumbos, other SS here also. 10/5- HJHN-960 @ 12:30am ID as R. Sutatenza. UnID-SS-925 from 12:45am w/EE pop mx. 10/7- WSRF-1580 Fla. @ 6pm w/rr, WLLJ s/off in background, um. HISSD-620 from 6:15 very strong atop channel w/NX or commentary in SS. YVQJ-1080 @ 7pm w/ID as R. Barcelona & many references to that city. Who is SS-1078? (not 1075). 73, DUET.

RON CHRISTEN - 30 Lucille Drive - Cheektowaga, New York - 14225

Very little DX to report from here. I listened MM 10/6, & got three new loggings. The best was TIQ in Puerto Limon, Costa Rica, in EE, no less, operating about 5k above their assigned 1200k. They played many different types of songs, ranging from rr to the so-called "typical LA." The male announcer had a type of southern drawl, & gave many IDs. The only other good catch was HJBL in Cienaga, Colombia, on about 1162. Both these are on tape, and if I wasn't so lazy, reports might be out. 10/6 was very good to the S, & if I had the patience, many new CAs & SAs would now be in the log. I finished the frame of the NRC Loop, but am waiting for the loop kit. I built a mock loop using junk-box parts (24 gauge wire, variable cap from an old radio, etc.) and was extremely pleased with the results. Local WKBW was mullered down over 50db, & the usual splash on 1510 & 1530 was non-evident. I didn't do much experimenting, though, since I still don't have a base, and holding the loop seems to get a bit tiresome after a while, hi. The only verie to report is a v/1 from CFBC-930/ after a wait of three months. I still haven't heard from WCCP-1560 for report of 7/10 - has anyone got this verified? Also no word from WGMF-1500, even though a phone call during their TT promised a v/1, that was 7/13. Oh well, enough of my troubles - so I'll close by saying mucho DX & 73s to all.

CHRIS HAMBLY - 47 Chessell Street - Box Hill Nth. - Victoria, Australia - 3129.

Well, since this is my first Musing, I better introduce myself. I'm 23, single, work for the Victorian Railways as a Station Assistant. Hobbies are trains, SW radio & Medium Wave and tape recorder enthusiast. I belong to the Australian Radio DX Club, some of you American members might like to join this club while primarily for SW, it has about six pages on Medium Wave and those members who are after Australian stations' s/on & s/off and other information besides. This section is handled by a very capable editor in Robert Chester of South Australia. Any inquiries can be had from Robert Shepherd, 22 Howard Street, Glen Iris 3146. The approximate fee to join is \$5. Anyway, getting back to me, I have verified two Aust. states, NSW & S.A., and have about five v/qs. My present aim is to hear an NA station. I intend to get Gordon Nelson's loop antenna very soon, also I'm after an American TV Week if any members will send me one. I'll send one in return, or anything they want from Australia, if I can manage it. I must end now best DX, 73. (How about a kangaroo, Chris, hi? -ERC - and Welcome to the NRC. We hope to hear from you often - to Chris and anyone else interested, this report got here air mail in three days, when it often takes four days for an air mail letter to get here from say, Buffalo -ERC)

RAY "TIM" DAVISSON - 207 Winchester Road - Apt. 105 - Akron, Ohio - 44313

Greetings! It's great to be back in the Club again, after a two-year absence. Some info about me - I'm 20 (11/1/48) and have been DXing since Summer '62. Latest RX \*since '65) is an eight tube Hallicrafters SX-110. Current antenna is a 60' longwire, NW/SE (#14 copper wire). When I talked to GPN for the purpose of rejoining the NRC, he told me of a new loop called "FET Altazimuth". It sounds great. I hope many of you will purchase it. If it's better than the old NRC Loop and works as well as Jerry Starr's does it'll be great. GPN says it's even better than the old one. Anyway, DX totals for almost eight years - 1,175 heard in 45 states & 14 countries, 370 verified. DX: 9/22- WSRF-1430 Ala. @ 2:20am f/c; WFLB-1490 N.C. w/rr-AN; WTVR-1380 Va. @ 4:07 am s/off of f/c; WSMG-1450 Tenn. @ 3:56am s/on EST; KLEO-1480 Kansas @ 3:04am f/c; WFLI-900 Pa. @ 4:21am; WHUN-1150 Pa. @ 3:45am f/c. 9/23- CJGX-940 Sask. @

12:47am w/mx. 9/26- WKCY-1300 Va. w/ring o/WERE. 10/4- WEZJ-1440 Ky. @ 3:01am r/c & ET. 10/6- KWK-1380 Mo. @ 1am beginning "automated" AN "Mx Till Dawn" program, not the classical type, somewhat down-tempo R&B w/jingle ID between each record. Veries: v/f- WBIS WJBG WJXY WOIO. v/q- CJOE, plus v/1, CHSC WCBM WLEC. v/r- WSMG. v/1- WNYN WFLB, plus SC, WTVR, WHUN. Sorry to hear about Ralpie. He was a good man, always helpful. A happier note - I'm glad to announce I'm getting married in December to a 22-year-old school teacher. No comments! Anybody interested in a get-together this Fall or Winter in the Akron-Toledo area? If so, please write. What has happened to Dave Schmidt? (Who?) When's the new f/c list coming out? Thanks to all who've kept the NRC going. 73s. (Welcome back, Tim, and congrats sheerly the big day! -ERC)

JOHN W. HOOGERHEIDE - 3 Marquette Drive - Marquette, Michigan - 49855

9/28 started w/daytime log of WKPR-1420 Kalamazoo @ 5:45pm, Mich. #90 logged, then WKJR-1520 Muskegon Heights w/religious, 6pm; WJUV-1520 Loves Park, Ill. w/mx & NX till 6:30, then into c/w. KPRG-1580 Columbia Mo. w/odd s/off time of 7:25 - ten minutes later than it should be; KLTR-1580 Blackwell then C 7:45 s/off; pesty CHLO-680 who always dominates evenings s/off-CSQ @ 11pm, R. Bermuda readily audible on 1235 9/29 @ 12:30am, audio had many times previously but always too jumbled to ID - new country. WGSB-1480 again s/off-SSB 12:35, last MM it was 12) & announced 5:30am s/on; WHK again off 1420 - must be regular off MM as that's four in a row. Only BSM there. However, an SS finally in o/BSM by 1:05 but I couldn't get ID, any idea who this would be? Good SA reception tonight. WVJS-1420 @ 6:30pm w/NX. KYAL-1600 @ 7:30; many others as excellent deep south prevailed; WSGN-610 @ 7:40; WIS-560 @ 6:45; WAAX-570 @ 7:50; SS noted on 1150 @ 8pm; WSPA-950 @ 8pm; WCCO-910 @ 8pm; YNIU-965 @ 8:10, SS on 1550, probably Mexican; 960, HJHN, R. Sutatenza, Barranquilla, 8:30pm; KMLB-1440 Monroe @ 8:35; WQVA-1250 @ 8:35. 10/6- WZKY-1580 Albemarle, N.C. r/c-TT 12:30-12:40 & asking for reports; WYSL-1400 Buffalo on AN, briefly atop @ 12:45.

RICK EVANS - Box 1,988 - Gary, Indiana - 46409

Greetings. DX has been a little bit around here in the past week. 10/5- I did some SSS DX: WMUS-1090 Mich. 5:40-6pm s/off; WMIX-940 Ill. 6:10-6:30 s/off; WHHY-1440 Ala. 6:45pm; KTCN-1530 Georgetown, Tex. s/off @ 7. WKCT-930 Ky. 11:15-11:25pm good at first, then poor. KSAL-1150 Kans. 11:30pm in long enough for ID but not for report; KGBS-1020 Cal. midnight, good. 10/6- Very Southern night, mostly SS stations. WPLB-1380 Mich. r/c 12:15-12:30am; KYW-1060 testing 12:25; CKFH-1430 Ont. fair u/TT lam; WINN-1240 Ky. w/c/w 1:15; WRDW-1480 Ga. ET heard @ 1:25; WSUN-620 Fla. @ 2-2:30am w/good mx; WINH-1470 S.C. 2:45-3am F/C-ET poor; WOHO-1470 O. 3:05 poor. 10/7- I listened but not much. OC-1560 (2:30-3:30 no ID; CHSC-1220 Ont. c/w 3-3:30 u/o unID TT mixed w/slop from local WJOB-1230 Ind. 10/8- Good Southern night. KDPH-1370 Ia. r/c 12:30-12:45 o/WSPN WSPD noted w/Hi; WCIS-1460 Miss. r/c 1-1:05am heard; WATM-1590 Ala. r/c w/marsh mx 1: 5:130 o/WAKR; KIRA-1010 booming in; WRBC-1300 Miss. 2am s/off; KCON-130C Okla. 1:40-1:48 good but poor later; WMAK-1300 Tenn. 1:55-2:10; WVOJ-1320 Fla. c/w 2:30am. WRBC, WMAK, KCON all fighting it out @ 2am. Totals here now 641/316, percentage of logged now verified is 49.3%. Veries this Summer since 7/1: WIP WGRt WLTW WBRC. WERC-960 reports they are AN except 1-5am MM. Rats, they tie up 960 here for me. KWK noted AN MM as was WJOB-1230. Local WWCA-1270 is AN-6. Goal for October is three reports a day out & I should have 25 cut by tonight. 73 - see you next week.

MICHAEL B. NORTHAM - Box 1,122 - Lake Grove, Oregon - 97034

Greetings group. Correspondents, please note the new address above. I hope that all had a good time at the Convention. This was the first IRCA/NRC Convention I have missed in three years - I'd been looking forward to touring Budweiser's facilities, too! The primary reason for my absence this year was my marriage (8/2) to the (by now) well-known DXeress, SJB. The expense of the wedding & setting up a new household sent my Convention plans down

the drain. Not much DX lately (only WMs) as my summertime hobby of sports car racing & rallying has been eating up my spare time, but a few veries in. v/1-KACY KBMI. v/q- KRUX-TEST, KHON. I'm looking forward to the DX Contests this year, but I've vowed to beat Kaskey, this time, for a change. 73 & good DX. (Congrats, Mike! And, what is "rallying?" -ERC)

JOHN H. SHANNON - 478 East High Street - Kittanning, Pennsylvania - 16201

The band has been covered w/SS stations nearly ever 5 kc across the band. The IDed ones, plus a couple new domestics are: 10/2- HJCY-810 10pm. 10/3- HJAF-919 12:48am. 10/4- 4VB-830 6:30pm. 10/5- R. Tropical-1040, Colombia 1:07am, HCN2-870 1:18am. 10/9- TQHR-700 1:12am, YS??-755 1:15am // YSKLB-770 1:15am, WSIG-790 1:45pm. I also have several more that I have yet to ID. Maybe someone can help me out. Who is the Reloj Nacional on about 1300 w/a very strong signal the past four or five nights? I know now that the R. Caribe I mentioned in my last Musing is in Cuba, but where? Only one verie lately, v/1 WPAE. I modified my old loop by putting it on an altazimuth type mounting similar to GPN's FET Loop, and the results are fantastic. Although I have yet to really give it a full test, I find that I can completely eliminate many local signals that I couldn't before. I still think I will build the GPN Loop, however, as my old job is a bit flimsy for good altazimuth work. I had another nice DX session w/Dick Clark (not the one from American Bendstand, hi), and his house in Virginia, who is the first girl I have found to be interested in BCB DXing. The best of DXing to everyone. I hope you are logging the LAs by the dozens during these fantastic auroral type CX the past two weeks or so. 73.

JOSEPH KURETH - 9233 West Stayman Drive - Bellicott City, Maryland - 21041

DX has picked up considerably since the cool WMs I've been logging the domestic here as the other should be in 1300. CX are production in general. On 10/4 WMMT-1520 completely covering WKBN @ 8:40pm. WFAA-820 w/1300, plus o/WQXR on 10/3. SS from CA & SA have brought many new catches & identified. ZEBI-780 is heard almost nightly. First Costa Rica is TIKK San Jose on 10/3 @ 6:45pm. This is my first Musing in a long while so I'll re-introduce myself for the benefit of the newer members. Finishing up in my senior year of college at Towson State, near Baltimore as a Geography major. I have been DXing since 1962 and was introduced to NRC by Russ Edmunds & Rick Marx in 1964. Since, I have logged 1,152 stations from 31 countries. Other interests are station QMs & TV DX. All correspondence will be welcomed. I missed the Convention this year, but N.J. looks likely. Very sorry to hear of Ralph's passing. It's a loss to everyone in the NRC. A belated praise on the format and printing; convenient size, clearly printed and is 500% better than the old mimeographed DX L&C. Volume 37 looks great this season! I just hope the time holds up for more Musings. 73. (How about Dave Roys' on 11/29, Joe? -ERC)

RUSS EDMUNDS - Box 940 - Wayne, New Jersey - 07470

Well, the Aurora is still with us, hi. 10/1 - saw many new LAs, but mostly Cubans, dernit. 10pm, KEM-940 & unID SS, CMAN-700, GPN-700, WMMT-600 all in, all unq. Unn TIGB weak w/GIP, Cuban on 120, a bit low, 50 strong. CMKP-670, YND-675, WPA-680, all unq. CMAN later o/WQXR, also hi! (12:10). WCEM in later, too, after WRKO s/off. CMKT-700 // 1300 for news @ 10:40, also notices CMKJ-730, CMAN-780, CMCD-700 around same time. 12:45 saw RL-800 unq. 40 Q/S-9, WFAA-820 w/religion program very strong 11:10, TIGB-825 taped for report, 11:17. BHBS-834 in very well, both unq. Didn't get good WMMT-820 o/WQXR after WRKO s/off; 12:08 KERPM-840 in well also (unq), WMMT-820 as well @ 12:05, HJAF-919 w/ Cuban 12:12; HI on 790 was WMMT-820; 12:13, a good surprise as RL-800 was in w/strength equal to what WMMT had in 12:12, also a good report & reported for Guatemala, 21 country heard. 12:14, unq from WMMT-820 & 2/c from WMMT-820, both unq. 1:15, WMMT, R. Caracas, unq. came out again. 10/7, taped WQXR-820 v/o WFLR @ 11:02, but unq & already veried. UNID 1300/1300-9 burning; WMMT-820 11:17. YS??-755 YND-775 WMMT-820 all in well but not taped as I ran out of tape.

Grr. PJB-800 & TIGB-825 strong, though. The latter was a bit muddy. 11:39pm, WNYC-830 on for retake of Brooklyn's primary election, no WCCO at all u/then, just SS. More next week. 73s.

PAUL KIROY - 2113 Fort Davis Street S.E. - Washington, D. C. - 20020

Since 9/28 there has been lots of very good IS-Caribbean splits coming in. A Y-jack was added to the HQ-180 for the tape recorder w/no signal loss, surprisingly. DX: 10/4- PJC2-855 11pm & 10/5 on till 1am. 10/4- PJA5-1435 8:17-8:30pm. 10/3- TIFC-1075 @ 7:35pm w/light SS mx. 10/2- WQMB Pa. s/off @ midnight w/SSB. 10/4- HOJ-1045 strong @ 10:52pm. HJCK-1160 w/cl mx after 11 pm NX. 10/5- TIQ, R. Casino, on new frequency of 1205, in EE 12:06-1am s/off. 10/6- What sounded like WISA-1450 Vt. @ 2:12am w/ID, however they're not listed "on" for this time. HJER-1025 w/RCN programming @ 1:27am. 10/7- HJBV-1545 @ 12:20am w/Caracol. 10/9- DAKAR-764 w/unusually good signal @ 1:20am, no sign of Sierra Leone or Conary. 10/10- UnID SS, probably TICM, 1210am on 925-1300 group-to-date U.S. P&B.

FATHER JACK PEJZA - 12096 Ventura Avenue - Ojai, California - 93023

To re-introduce myself, since I haven't Mused in a considerable time, I am a Catholic priest, 35 years old, business manager and physics teacher at Villanova Prep School, 75 miles NW of Los Angeles. I started DXing the SW bands about 2 1/2 years ago, although I used to do a small amount of DXing about 20 years ago while in high school in San Diego. I began to DX the BCB seriously in January 1968 and joined NRC in the following March. I am now Editor of DX Worldwide for IRCA and have just been elected to their Board of Directors. I have heard about 500 stations, and have verified 154, including 27 foreigners.

BOB KARCIEVSKI - Box 3151 - Dalu City, California - 94015

I was sorry I couldn't make the ST. LOUIS Convention. It was the second in a row I've missed after - no - that's wrong - I was to four in a row finishing with Montreal. I missed Eugene, was at Boston, and missed ST. LOUIS. If I can swing a vacation adjacent to Labor Day next year I will probably make New York. And I hope to help advocate Sacramento in '71! Keep up the good work, ERC, & congratulations on your METS! Since I'm not an NL fan, I'll root for them until World Series time.

ERNEST R. COOPER - 438 East 21 Street - Brooklyn, New York - 11226

I was very interested in the "Radio Free Asia" verie shown us in the last issue as I had received "junk" mail asking me to contribute to it. I had never heard of it, and doubted its existence, since no DXer, SW or BCB, had mentioned it to my recollection. Very nice v/1-SS in from R. Cordillera-1190, w/Podolar pennant, #29 from Colombia here. DX: 10/6- I logged a loud Colombian on 1205 which I IDed as Radio Internacional (Cucuta) which GPN said in Foxy's column he heard on 1212A a week previous. 10/7- 1500, station s/off @ 5:30pm after hymn & SSB, probably WGMF, unID, way u/WTOP. A bit of WYNA-1550 noted @ 5:42pm, not enough - they s/off w/no music. TGT-1187 IDing very persistently as "La Sonora" in w/a bang 9:27-10:17pm, for an easy log & report. 10/9- WMMT-1510 noted @ 5:28pm s/off, not enough. A little more the next night, still not enough. MM 1/13- SS-890 heard @ 12:32am, but then WIS took over, so no report. KEX-730 o/CKAC, calling itself "La Eekis", quiet mx, @ 12:45-1, unq. There was somebody testing w/a strong signal (not WQXR, natch) on 1560 with a male vocal w/protest song or similar @ 1:03, left the air w/no words spoken @ 1:07 - did anybody ID this guy? While driving on the Bronx River Parkway on Sunday afternoon 10/12, around the Ossining area, I noted WQXR on 1170k; and at noon, they made a fast ID as "WMLB in Cornwall, N.Y., testing," so at long last, they have gotten on the air. These Auroral CX seem to have died out now, but I look forward to them eagerly, as I always add several new ones to the log, and in this day & age, it seems the SAs & CAs & Island stations verify best! CUN7.

Radio Anguilla,  
The Valley,  
Anguilla.  
British West Indies.  
.29 Sept 69.

J. A. Bowab,  
O I Division,  
USS Forrestal CVA59,  
FPO New York.  
USA. 0950I.

Dear Sir,

Thank you for your letter of Sept. 21st; we are always happy to receive reception reports.

It was certainly our station that you heard, judging from the programme material you submitted. As you rightly guessed, we are a smaller unit than St. Maarten, who have a 10 KW transmitter.

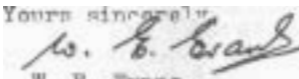
We operate on 1505 Khz with an output power of 500 watts, fed into a "T" aerial. Since yesterday we have extended our broadcasting hours, which are now as follows:

Sunday. 0630 - 0800 and 1200 - 2200.  
Monday to Saturday inclusive. 0630 - 0930.  
1200 - 1400.  
1700 - 2200.

All times given are local, (GMT -4).

At present we have a staff of two British civilians and six local people; the latter do all announcing. The intention is to hand over the Radio Station to the Anguillans when they are able to handle it, and we are training people to this effect.

We would be grateful for any further reception reports you may care to make when travelling in the vicinity.

Yours sincerely  
  
W. R. Evans.

Chief Engineer.

## DX BOOKSHELF



Phil Sullivan  
152 Third Street  
Leominster, Mass. 01435

This is the first NRC Bookshelf column and hopefully it will give all members a chance to see just what kind of a column it is planned to be. To save space it will be necessary to use some abbreviations for the publications cited, for example:  
IEEETrCT=IEEE Transactions on Communication Technology  
IEEETrAP=IEEE Transactions on Antennas and Propagation  
IEEETrBTR=IEEE Transactions on Broadcast and TV Receivers  
IEEETrB/C=IEEE Transactions on Broadcasting  
IEEES=IEEE Spectrum  
PrIEEE=Proceedings of the IEEE

EW=Electronics World  
WW=Wireless World  
RE=Radio-Electronics  
HR=Ham Radio  
CQ, QST and 73 will not be abbreviated.

While all these abbreviations will not be used in this issue, they are presented here to give everyone an idea of which publications are the most likely sources for material for this column.

As almost all NRC members are either in or have finished high school (or equivalent), no indication of education level required will be made if the article is one that the average high school student can read; higher levels, as college level or graduate level will be indicated where appropriate. No one should be afraid to try an article indicated as above his level, he may be exceptional and/or I may be wrong in evaluating the article.

So much for preliminaries--now to the contributions:

Optimum coupling key to efficient use of extremely small receiving antennas; Communications Designer's Digest, Jul. 1969, pg. 28-29: This article deals with wideband (un-tuned) coupling to electrically small antennas and illustrates the minimum size antenna that will produce a signal to noise ratio limited only by external noise. It is noted that reducing the bandwidth by 1/Q (tuning) improves the noise figure by Q. College level circuit theory will help get thru this one. (Ray Koore, Walpole, Mass.)

Links With The World; Doug Chase; CBC Times 12/26/64--1/1/65, pg. 10-11, and The Big 40-Watt Radio Network; Dill Hatton; CBC Times 10/19-25/68, pg. 14-15. These two articles deal with the CBC LPRT stns, the first with the network in general, the second with those in northern Ontario mainly. Both describe the set up and operation of a typical LPRT. (John Garofano, Raynham, Mass.)

List of Pacific MW Stations; Fred Woodley; Electron (Canadian), Feb. 1969. (Cliff Reno, New Canaan, Conn.)

Use of Commercial Broadcast Stations for Emergency DOD Communications; Selover, Griffith, Martin and Spector; IEEETrCT, vol. 15, #4, Aug. 1967, pg. 579-592. Starting about 1962 the DOD conducted tests on a communication system involving mw ECB stns. Messages were sent by FSK-ing the carriers by  $\pm 18$  Hz from their nominal frequency. The tests were on WRUN, WHAM, WWVA, WTIC and several others in the Northeast. College level probability & communication needed for parts of it; everyone can read most of it. (ye ed)

**26**  
 The DX Scene in New Zealand; Dallas A. McKenzie; Electronics Illustrated, Nov. 1969, pg. 92-93, 115. Discussion of DX in general in New Zealand, with considerable emphasis on BCB. Deals with the type of receivers and antennas used and why they are and what some of the typical catches are. This is (according to EI) the first in a series of similiar articles on DXing in various parts of the world. (ye ed)

That's all the contributions on hand to date. Thanks to all who contributed to this first NRC Bookshelf. Next column in about a month!

73, PLS

## ANARC REPORT

The 4th annual ANARC convention was held in Toronto this past August with some 20 DXers present. Suggestions brought up included holding the ANARC convention in conjunction with the convention of a member club and urging each club to apoint an official delegation to the convention.

Richard Wood has resigned from the QSL Committee (of one) thus there is an opening for an entire committee. This committee contacts stations that are poor verifiers in an effort to get them to improve their verification policy.

The EDXC (European DX Council--the European analog of ANARC) is strongly considering adopting representation on a club basis rather than by countries as they are doing now--i.e. a switch to a system much like ANARC.

Gerry Dexter is working on the DX Archives project--a project to preserve and display (as in a museum) the souvenirs (QSL's, etc.) of DXers who have died, rather than have these valuable collections destroyed. Two museums have already indicated that they may be able to display some cards.

DX census forms are still coming in so results may be a while off yet. One statistic so far: about 20% of those responding don't know what city they live in. (hi!)

ANARC has run a small ad in the Nov. EI to attract new members for all the clubs.

73, PLS

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*Tired of people making fun of you? When was the last time you heard a good C P C joke? Join today. You might win a free trip to Gotham City.*

Plans are already underway for the 1970 NRC Convention. The convention was originally to have been held in the North Jersey suburb of Paramus, but due to circumstances beyond our control, namely money, it will actually be held in suburban Hasbrouck Heights, instead. Contrary to recent rumors, we have been able to avoid holding the convention in a Holiday Inn. Rather, it will be held in the Quality Motel on Route 17, near Routes 46 & I-80. Further details will be forthcoming in subsequent progress reports.

One major change this year will be the start of informal activities late Thursday afternoon (9/3). This is due to the large amount of DX'ers in the area who could make it in Thursday, and the fact that several arrived from good distances at St. Louis on Thursday.

Reservations will be taken by the committee, and then turned over to the motel in mid-August. This will eliminate the problems encountered with the green-eyed elephant in St. Louis. We will make every attempt to group DX'ers in accordance with their desires.

Convention arrangements will come under three headings: Overall, which includes motel, banquet, and printing arrangements handled by Russ Edmunds, Convention Committee chairman; tours & banquet speaker handled by Ernie Cooper, and agenda handled by Page Taylor. Any comments or suggestions you may have should be addressed to the committee member most concerned with the area in question. Addresses & phone numbers are below:

Russ Edmunds - Box 946, Wayne, N.J. 07470 (201) - 335 - 6397  
 Ernie Cooper - 438 E. 21st St., Brooklyn, N.Y. 11226 (212) - 856 - 0907  
 Page Taylor - 10 Bartholdi Ave., Butler, N.J. 07405 (201) - 838 - 8728

This year, also, there will be an official NRC auction for the purpose of raising money for the NRC, what else? Anyone wishing to donate items for this affair is invited to bring same.

There are several points which the committee is undecided upon, and therefore, we are asking all members who are entertaining ideas of attending the 1970 convention, to fill in the form below, rip it out, and mail it to me at the address above.

*Russ Edmunds*  
 Russ Edmunds, Chairman

PLEASE FILL OUT AND RETURN AS SOON AS POSSIBLE.

- 1) Would you prefer a buffet dinner or a choice of two main dishes for a regular banquet ? \_\_\_\_\_
- 2) Would you be interested in tours of small stations, or perhaps a clear channel transmitter ? Other ? \_\_\_\_\_
- 3) Would you be interested in a speaker from the Broadcasting industry as a banquet speaker? \_\_\_\_\_
- 4) Would you be interested in a DX-pedition and picnic on Sunday evening? \_\_\_\_\_
- 5) Do you have any other suggestions or comments ? \_\_\_\_\_

\_\_\_\_\_  
 Your Name: \_\_\_\_\_