We dedicate this issue to the memory of longtime member Lec Alster of Rahway, NJ, who passed away in May 1976. We just received notice of the sad event. Although we were geographically close, we at HQ never met Leo, who ran a hardware store on a 6 day week. His contributions will be missed.

On a brighter note, we take great pleasure in announcing the formal acceptance of the publishing tasks of DX NEWS by the Louisville Area DX'ers. We have received a letter stating that they have ironed out most of the initial logistical problems which had impeded their takeover, most importantly, the arrangement of printing contracts at a competative price. The LADs will assume publication of DX NEWS in April of 1977. Inasmuch as we have separated the membership and publications aspects of club operations, they will only be faced with the not inconsiderable task of getting the bulletins out, but also of overall club management. Editing and publishing of manuals, forms, and books will remain here in NJ, coordinated through the Publications Center and the new club HQ. This will relieve additional load on them, and will leave us with a significant contribution to the club here, but one which will relieve us of the day-to-day and regular-deadlines aspects. We feel that this additional de-centralisation of club operations will be an aid to all future publishers, and not just to the LADs. We all give them a hearty vote of thanks and good luck. More on this later.

DXN SCHEDULE FOR EARLY SPRING: We've already published (V.43 #30,p2) a schedule taking us up to Christmas, but have been faced with a dilemma about when to resume, due to the possibility that we would transfer publications at that time, and also due to the fact that Christmas and New Year's Day falling on Saturdays complicate our scheduling even more. Fast experience has shown that mailing of columns or bulletins between Dec. 20 and Jan 2 can lead to problems, especially due to the oversize neture of the editors' copy sent to HQ. We also must reckon with postal holidays, business holidays and keeping our editors from having to do columns on Christmas or New Year's Day or Eve. With these factors in mind, we have no alternative but to schedule a 3-week break at that time. We realise full well that this will cause undue delays in valuable DX info reaching the membership, but see no other viable alternative. Thus, we urge you to get DX info and TEST info in early to make up for the long break. We also urge members to subscribe to the NRC Flash Alert Service to be sure you are notified of late breaking TESTS. Send several self-addressed, stamped postcards to Dan Myers, FAS Co-Ordinator at the address of the back cover to enroll. The schedule than is:

# 9	-	12/20	₹13	-	1/31
		1/10	#14	-	2/07
#11	-	1/17	#15	-	2/14
#12	4	1/24			

The schedule for the remaining period before the LADs take over will be published as soon as it is formulated.

THE WORLD'S OLDEST AND LARGEST ALL MEDIUM-WAVE DX CLUB

	C. P. C. TEST SCHEDULE		
HONDEY NOV. 15	_ 0400-0500 * WORD-1600 * Hipen, WI	5000 U	MHH
	- 0230-0330 * Milb-1560 * Fart Varbington, Wil	250 B	MARK
	= 0300-0330 * KVIII- 980 * Seniore TX	1000 P	130
	- 0330-0400 * KLBM-1450 * LaGrange, CH	1000/250 U	NRC
CODAY 22	= 0300-0400 * KNEL-1450 * Junet tes, TX	1000/250 T	IRC
22 or 2;	= 0200-0230 * NBCB-1360 * Galax, VA	1000 T	BBC
RIDAY 26	= 0300-0330 * WYNN- 540 * Florence, E	250 TI	NBC
tatuhhay 27	= 0000-0200 * WHIE-1320 * Griffin, da	5000 T	NBC
Eathay 29	= 0200-0300 * NVM-1280 * Pearenll, TI	500 D	IRC
CONTAY THO. 06	- 0100-0200 * WORD-1400 * Pleasantwills, N	1000/250 U	NNB
7.75	= 0200-0400 * WTAW-1150 * College Station, TX	1000 T	IRC
	- 0300-0330 * MAAT-1450 * Natchez, MS	1000/250 T	NBC
	= 0300- * KBCW= 910 * Caldwell, ID	1000 D	IRC
CNTAY 13	- 0130-0330 * WICT-1000 * Horseheeds, NT	1000 D	INC
	= 0500-0600 * IUE-1390 * Waxahachia, IX	500 P	INC
CNDAY 20	= 0 0 00-0200	1000/250 U	NBC
	= 0330-0400 * WEGO- 940 * Wartburg, TM	1000 7	NRC
CHDAY JAN. 10	= 0230-0330 * WGLB-1560 * Fort Weshington, WI	250 D	10000
at 104 of month	= 0030-0045 * WHI-1450 * Neuberry, MI	1000/250 U	HHC
but 7H of month	= 0100-0130 * WTME-1390 * Martidian, NS	5000 T	NBC

THE BILLS:

- INSL Big band mx, code IDs. No v/s. Box 206, 76849. Arr. Artie Bigley.
- WHOR No pgm, details, V/a: Ed Boyer, CE, (24333), Arr. Dave Schmidt.
- WINS No pgm. details. W/s: James N. Maurer, P/GM; Box 1586, 29501. Arr. Rebelstein,
- WBIE FoF TEST. No further details. V/s: Charles E. Gaskins, CE, Noz 971, 30223.
 Arr. Mike O'Shea.
- EVWG Big band ms, TT, Code IDs. Address listed is Box 3098, 79604. (Log lists Box 938, but we'll assume 3098 is correct). No v/s. Arr. Bigley.
- WGLB No program details. V/s: Richard Bluedorn, CK, Box 347, 53074. Arr. George Davis III.
- EVAN Music & IDu. No v/s. Zip is 76950. No address available. Arr. Artis Bigley.
- WUWC No program details. Will simulcast on FM, so may be RS-type. V/s: Faul Velaka, Box 156, 54871. Arr. Davis.
- KLEM Masic & IDs. Will use both 1 km & .25 km. V/s: Werren D. Gurry, E; Box 907, 97850. Arr. Dave Lewis.

WWET - Info from Dave Levis

WINK - Info from Jerry Rarr

NOTES &c FROM NJPC

We also take great pleasure in amnouncing that we have selected a new editor for DDXD to replace Wes Boyd, who had indicated his wish to retire as editor this fall. The new editor will be Dric Bittenhouse, Barrington Hall \$101, 2315 Dwight Way, Berkelay, CA 94704. We trust that Eric will be using that address for DED, although if that is incorrect, we will make a correction shortly. Eric will be taking the reins for issue \$ 10, dated 1/10/77. More details on this will appear in subsequent issues.

NEW MEMBERS and REMEWALS will not appear in this insus. Fleens see next issue FLASH TIPS may be found on page 529 -ALGERIA Ain Beida good carrier, low autio, 0202 10/30. (Klemp)

530 -JAPAN JDQG Morioka 11/1 1330 only faint carrier noted but strong suspect due to reception a few weeks ago. No sudio hrd this time. (Lobel)

535 -GRENADA R. Grenada is becoming quite a regular this season. Noted 10/29 at 0032 w/a woman singing terribly out of tune in what appeared to be a special fund raising per. (Booser)

9 -LIBYA Pair to good w/AA chanting and violin mx, 2238, 10/25. (Connelly)

545 -DOMINICA R. Jumbo vy good 10/29 0132-0215 s/off; nostly FF pop vocals, some EE pop. (Delorenzo) * Nightly excellent around 0100. (Klemp)

948 -ALGERIA Oran good w/esotional talk in AA, 2237, 10/25. Strong, man in AA, 2310, 10/26. (Connelly)

552.5-COSTA HICA San José, Radio Liberted a/on 11/1 1000, strong. (Schats)

566 -IMELAND Tullamore noted w/poor mig, just o/noise and mlop w/moft ax, then definite EE talk; apparently a panel discussion, 2200, 10/26, (Connelly)

580 -FIERTO HICO WKAQ San Juan good, steady w/SS rock 0511 10/30, (DeLorenzo) * 10/18 2320 vy good w/lively mx and SIDs, (Erodsky)

584 -SPAIN RNE briefly at 2350 on 10/14 w/US folk and pop mx including "Paper Moon"
Man in SS. Paded rapidly. Hete noted on 638 and 737 but no audio. (Brodsky)

590 -CUBA Excellent w/ranchero ax, 10/21 0805 //630 and 690. (Erodsky)
602 -FRANCE Lyon poor/fair w/man in FF, in WHEI buckshot, 2235, 10/25. (Connelly)

625 -COSTA RICA TIKE R. Omega 0205 on 10/26. (Klemp) /(Schats) -NICARAGNA Unid w/CMT -6 TO 1035 11/1. "Rural" pgm w/rustic-sounding ancr. 640 -COLOMBIA HJBJ La Von de Santa Maria is now running NEF and is second best to CMC most AMs after 0600 when TOW s/off. (Cooper)

645 -PARMGUAY Chel. Oviedo, R. Casguardi not noted here this season; likely returned

to 640. (Schatz)
-ENGLAND BSC Deventry fair in EE apparently w/drama 0542 11/2. (DeLorenzo) *
10/24 0417 w/nx, Dave Lee Travis 0430, special nx pgm 0445, all on World Service
in EE. (Vernon) * Poor/fair w/man and woman in EE; hets present fm Gashia-648
and TV birdy-645a, 2207, 10/29. (Connelly)
-USSR Iman w/good audio 10/27 at 0937 w/man-woman in RR; 10/28 good at 1359 w/

YL in JJ. Vy weakly 11/1 abour 1345 thru domestic elop. (Kaskey) 660.5-HICARAGUA Managum, Preferida AN 11/1, strong bet. (Schatz)

663.5-UNID SA Noted here on several occasions, likely coincides w/Gene Martin's (IRCA) unid. Doubtful if Paraguay. (Schats)

665 -PORTUGAL Lisbon w/cl mx 0130 on 10/25, (Klemp) 700 -COSTA HICA TIHB u/MLW 0136 on 10/25, (Klemp)

-COSTE RICA Tirm (VMLW 0136 on 10/25. (Riemp)
-CHERNLAND (Tentative) Simitaq 10/24 0105-0107, inst mx, alternating w/Doris
Day records, no armis 0/VLW w/hockey. MoR noted many evenings at SSS before
WLW blasts in, but still no ID. (Vernon)

701 -UNID FF talk, strong carrier, weak modulation, alop from MNKO and MOR, 2202

on 10/29. (Connelly)

715v -ROUTH KOMMA HIMA noted on this side of 710 10/28 at 1351 w/YL talking, thereafter not noted so quite likely back on 710 now. (Kaskey)

719 -POHTUGAL Sorte in as early as 2135 10/31 w/san in FF, 10 min before local

sunset. (Delorense) * At good peak level w/slow operatic male FF vocal w/guttar accompanisent; slight fast SAH noted under, 2104, 10/25. Good, man in FF 2148, 10/29. Strong w/time pipe, IS and ID, 2200, 10/29. (Connelly)

725 -SUHIMAN SRE Paramaribo 0325 on 10/9. (Klemp) /(Schatz)
735 -PARAGUAY Amunción, Radio Guarani, passed by for AN Melodía MM 10/30 but didn't realise it 'till next sorning. Too weak for Quito, and 835/1306 were both in.
Will log it next time, but still blew an unprecedented 3 new EP's in one nite.

737 -SPAIN Barcelons good despite slop from CBMM/CBL, man in SS, then dramatic sounding pgs w/orchestral mx and interspersed talk, 2228, 10/25. Good on THF w/SS talk, 2307, 10/26. (Connelly)

740 -OOLOMBIA Uhid - slogan doesn't match any of those listed for this freq - hrd ANing 10/22 and 10/25, w/usual Colombian fare, (Cooper)

746 -UPPER VOLTA Fair 10/30 2338-0000 s/off, had slow mative folk az and man in vernacular: used balafon IS after s/off anat, new country here. (Delorenzo)

750 -ALASKA KFQD Anchorage in finally 10/27 at 0933 o/WSB and slop. Noted nightly thereafter armd midnite local time. (Kaskey) -JAPAN JOIB 11/1 0855 w/JJ; S4. Mixed w/WSB blocking pips on hour. (Lobel) FIS -PORTUGAL/UNID Lisbon extremely loud (local level, S9 plus 40 db) w/cl mx, then PP talk; 3.2 hz SAH present and occasional Slavic talk by woman audible under during quieter passages of mx on Lisbon, 2230, 10/25. (Connelly) -SENEGAL Dakar 2213 on 10/26 good carrier low audio, WABC splash. (Klemp) * Vy good on Realistic TRF; man in AA, 2150, 10/26. (Connelly) JAPAN JOUB Akita. Per R. Seaver tip I tuned for "Music Box" s/off and caught 10/30 at 1500 w/clear EE ID shdortly followed by 2½ mins of "Music Box" s/off theme then OC off. (Kaskey) -SPAIN Caceres et al fair w/man in SS, 1.6 hz SAH present, 2112, 10/25. (Con) -COSTA RICA TIW R. Uno 0320 on 10/6. (Klemp) 775,1-NICARAGUA R. Mundial TC's ca. 0945 11/1. not too strong. (Schatz) PORTUGAL Miramar good w/mx, then man in PP, then 3 long time pips and one short one, 2058-2100, 10/25. (Connelly) * 10/24 0411 YL ancr, then lovely "Tick, Tick Tock" song in PP, perhaps singing about a clock, hi. Ex sig, blocking WBBM. OLOMBIA HJCY Bogota 11/1 0920 w/S9 sig. Many IDs and bells. Some (Vernon) QRM. (Lobel) * R. Sutatenza, s/on 0856, easy on MMs and gives calls and freqs of all the Sutatenza stns. (Cooper) all -ANDORRA Sud Radio generally dominant o/Morocco, woman in FF good on TRF, 2152, 10/26. In like a bomb, well atop Morocco 2255-2302 (s/off), 10/26. Loud w/mx followed by FF talk, 2150, 10/29. (Connelly) -MOROCCO/EGYPT Rabat dominant w/AA talk after Andorra s/off o/Batra w/female AA vocal, good, 2305, 10/26. (Connelly) -LIBYA (Tentative) Ultraloud AA mx atop a fast SAH, 2154, 10/26. (Connelly) JAPAN JOBB Osaka 11/1 1350 w/all EE lessons u/WCCO. (Lobel) * Identical to JOUB s/off w/Music Box 10/31 at 1500-05. (Kaskey) -MEXICO XELA 0504 on 10/8. (Ritayik) -UNID Radio Colombia, 0640, who? Barranquilla noted but could have been in nx item. Straus or anybody, who? (Ritayik) -BELIZE R. Belize 11/1 0530, just a carrier. Thought I had occasional audio. First time this season. (Lobel) Eji 2-PARAGUAY Villarica, Radio Guaira, taken for just another exotic Ecuatorian, but the Caaguazu-like mx didn't fit, and the "5:40" TC at 0840 10/30 clinched it. Quite unexpected! (Schatz) -AZORES (Tentative) Vy clear w/lively vocals and woman in PP 10/29 2350-56, abrupt fade killed positive ID. (DeLorenzo) JAPAN JOCK Niigata. 10/31 w/NHK pips 1400. Clearly rovd at time but freq was just a low rumble most of AM w/little distinct. (Kaskey) -USSR Spassk Dalniy w/chimes and 6 pips o/HLKY (..-) at 1400 10/28. (Kaskey) His -ITALY Rome fair w/man in II 2335 10/29, ditto 2250 10/30, WHDH no problem here. (DeLorenzo) * On 10/28 at 2300 w/time pips, woman in II w/ID (?) and nx. fair w/deep fades. Disappeared by 2315. (Brodsky) * Tentative 0139 10/25 w/low audio. Time doesn't agree w/WRTH. Sked change? (Klemp) This is AN. (ED) -MEXICO XEZF Mexicali, BC 11/1 1356 w/many "La Rancherita Contenta" IDs by male ancr and ranchero mx. (Lobel) -SPAIN Murcia fair w/guitar mx and man in SS 0512-22 11/2. (DeLorenzo) -MEXICO XEUN 0135 on 10/21. IS of 6 notes. IDed as R. Universidad de Mexico. Time given as "8:35" which doesn't seem right since that would be EST I think. Pgm mainly cl and jazz selections w/no interruptions. (Brodsky) -MEXICO/BRAZIL XEMO Tijuana and Radio El Mundo fight it out here MMs around 0630-0800 - XEMO's in EE, with religion. (Cooper) -SPAIN Zaragoza atop low growl w/woman in SS, slight reverb noted (as if ancr was speaking in a large hall), 2313, 10/26. (Connelly) -CHINA Foochow time pips 10/31 at 1500 (----) weakly atop TVI. (Kankey) -JAPAN JOPK Shizuoka noted atop 10/31 at 1410 w/NHK-1, -ALGERIA Algiers fair w/man in FF 10/31 2156-2205 way s/WHNG. (Delerense) - Good w/AA male vocal and flute accompaniment, atop unid US -JAPAN JOHK Sendai atop freq w/poor cx 11/1 at 1300 - NHK pips well rowd. (Kaskey) -ITALY (Tentative) Milano likely w/whopping het on 900 Canadians, occ. bits of cl mx surfacing, 2315, 10/26. (Connelly) -MEXICO (?) XEW presumed here w/end of telephone call in pgm which ended at 0305. Followed by what sounded like stock market report and nx or commentary mentioning Nixon and Watergate. No Def. ID but Mexico mentioned many times and cx favored

Mexicans that evening (10/21). (Brodsky)

SURINAM Nieuw Nickerie. RANI believed responsible for the almost dead carrier here early evenings: borne out by DF. (Schatz) -BELGIUM (Tentative) Possible Wavre w/vocal mx into DD? nx at 0600 fair sig on 10/25. (Straus) -UNID Mush mx (Larry Welk style) fair/good, no ID, 2218, 10/25. (Connelly) -MEXICO XEQ 10/21 0100 excellent w/TCs after every mx selection. XEQ IDs. First time here as CBM usually dominant. (Brodsky) -FRANCE Toulouse fair w/FF talk and mx in WPEN slop, 2216, 10/25. (Connelly) -MEXICO XECM Tijuana. BC 11/1 0547 w/extreme modulation; S12 on a scale of 10 (estimate); my poor S-, eter. Surprisingly enough, sideband spaltter was not too much. (Lobel) -UNID SS 11/3 fm 0050-0100 w/off. Only Canaries listed on but one should take WRTH skeds w/a grain of salt. (Hutton) -COSTA RICA TIRS R. Atenea at 0129 on 10/25. (Klemp) -UNID Slow (almost funeral-style) cl mx here, 2318, 10/25. (Connelly)/(Cooper) -VENEZUEIA YVKA Barquisimeto, R. Tricolor (green? tree color!) is AN MMs, w/ tremendous sigs on MM 10/18 and 11/1; in the clear and S9 on 11/1, in fact! -UNID Same mystery IS is being had 0445 except 10/29 when noted at 0545. Sounds like a doorbell w/2 notes. (Hutton) 1016 -TUHKEY Istanbul 10/24 0328-0339, YL singing in mid eastern style to 0330, YL ancr, breif IS, dunno if per WRTH, then group singing in wailing eastern style, 0330 plus. tremendous sig. local level for 10 mins, GG QRM after 0330. (Vernon) -TURKEY/WEST CERMANY Istanbul dominant and potent w/male chanting at 2120, 10/25; Mainz-Wolfsheim rising atop at 2122 w/lite mx. (Connelly) -COLOMBIA Piedecuesta finally IDed 1014 11/1 w/"Viva Santander" before NA at s/on. Nominal 1030 khz. (Schatz) -PORTUGAL Porto Alto beautiful sig w/Lou Reed song 2228, OM takes phone call 2231, at 2232 under I had an EE OM giving the temp in Celcius for various E. European capitals. Any ideas? 10/29. (Straus) * 2314 10/28 man in PP. guitar selections. Audio vy poor and muddled but sig good and easily seperable from WBZ slop. (Brodsky) * Good w/man in PP, then slow lush orchestral mx, hetted by weaker 4VEH-1035 and slopped by nulled local superpest WBZ, 2316, 10/25. (Con) -EAST GERMANY Dresden 10/24 0325 song "Grenada" then femme ancr in GG. Fair aig. (Vermon) -FORTUGAL Norte likely here wreaking KYM/GJRP w/cl mx, 2322, 10/25, (Gennelly) -UNID LA Radio Reloj w/GNT-5 TOs 1015 11/1. Likely Golombia. (Schats) -WHEZIELA TWOJ H. Barcelona 0220 on 10/21. Fair to poor. Many ads w/phone #s in Barcelona and Puerto la Cruz. LA mx. Domestic semi-local WTIC nulled. 1st time here too. (Brodsky) -HONDURAS R. Aeropuerto, finally got in w/a definite ID and reported. Log covered 10/19, 0539-0631 and MM 10/25, 0534-0602. They begin every anmt w/a few slides on a harp. (Cooper) -ENGLAND BBC ex sig w/OM nx in progress at 0620 10/25. (Straus) -UNID AA chant (or Morrish SS mx), then woman talking, o/bad low growl of hets, fair strength, 2259, 10/25. (Connelly) 1115 -MOROCCO Quarzazate at good peak level w/AA chant by woman, 2.4 hz SAH possibly fm Italy, 2259, 10/25. (Connelly) -ANTIGUA Caribbean Radio Lighthouse vy good 0345 10/25. (Klemp) 1165 Possibly USSR's megawatt here w/ripping het on HJNW/WWVA, 2235, 10/29. (Con) 1169 -UNID Sweden or Spain here w/potent carrier, occ operatic vocals, 2256, 10/35. 1178 -CUEA The Cuban Minute Man is here, killing 1180 on SMs, WHAM's day of/(Connelly) rest. Now I know why I haven't hrd Globo lately - they've moved to 1220! Goodbye forever. (Cooper) 1187 -INTERNATIONAL WATERS/HUNGARY R. Caroline w/strong carrier in CHTN slop, male vocal noted at 2255, 10/25. Vy strong w/Melanie record atop 2nd stn w/Hungarian or slavic talk by woman (Szolnok), approx 3.5 SAH, 2312, 10/25. (Connelly) * R&R mx, DD DJ, ads, ex sig, 0630 10/25. (Straus) * 10/24 0315 plus rock records

in clusters of 3, OM noted 0358 in vy subdued voice w/mx titles and ID. Fair sig, voice anmt barely audible though. (Vernon)
-UNID On rainy 10/26, somebody here w/anmts in unid language, but USA sounding rock. Is this Caroline, and if so who's she serenading now? (Cooper)
-MOROCCO Good (S9), dominant w/AA vocal and slow finger picking on banjo-like inst; low audible het presumed to be from Munich-VOA and associated jammers, 2254 on 10/25. (ConnellY)

- 1196 -WEST GERMANY VOA Munich 10/24 0314 w/talk about Hungary in passisng in ES. Ex sig. (Vernon)
- 1200 -VENEZUELA YVOZ Caracas 11/1 0940 w/R. Tiempo ID and YV mx. S9. (Lobel)
- 1205 -FRANCE Bordeaux fair level w/man in FF, on Realistic TRF; some WCAU slop, 2157, 10/26. (Connelly)
- 1210 -JAPAN JOOR Osaka w/vy clear EE ID 10/27 at 1000 J.O.O.R. rovd on top of a s/on w/presumed NA at 1000 but couldn't identify new arrival. (Kaskey)
- 1214 -ALBANIA Military mx 10/24 0300 and 15 seconds, missed IS but OM/YL alternating. This noted w/trumpet IS 0400 at similar level, though 0300 time not noted in WRTH, was possibly AA talk at that time. Excellent level. (Vernon) -GREAT BRITAIN BBC fair w/man in EE, then rock. Slopped by WCAU, 2310, 10/25.
- -SPAIN/UNID Madrid good w/SS talk, cl mx, u/a powerful OC (possibly Bulgaria). 2.6 hz SAH, 2252, 10/25. (Connelly, last 2)
- 1250 -COLOMBIA Emisora ABC, Barranquilla, logged w/a fine S9 sig at times, MM 11/1. 0739-0812, on an AU morning, w/scant QRM fm anything stateside. (Cooper)
- 1268 -WEST GERMANY DLF Neumunster strong sig, but poor overall merit due to 1270 FFC/CJCB/WTSN uproar; GG talk, then mx, 2232, 10/29. (Connelly) * 10/24 0508 OM in GG, tones at 0510 YL ancr then choir mx w/harp. Fair sig. (Vernon)
- -CZECHOSLOVAKIA/UNID Prague-Melhik loud w/cl mx, way atop stn which sounded
- SS or PP man talking in a monotone drone, 1.4 hz SAH, 2325, 10/25. (Connelly) 1295 -ENGLAND Crowborough BBC poor w/talk o/low audible het, 2250, 10/25. (Connelly)
- 1300 -COLOMBIA Unid w/Todelar chimes noted atop at times on SM 10/24 in AU, w/help
- of WFBR being silent. Hrd 0733-0800 fadeout. (Cooper)
- 1305.8-PARAGUAY Asunción, Radio Paraguay. Not IDed 0850 10/30 but played mx a la Caaguazu, the DF was right, Guaira-835 was logged a few mins previously, and found it conveniently listed in WRTH-76 u/"1306". Quite an anticlimactic shock after 835.2 above! (Schatz)
- 1349 -FRANCE Nice 10/24 0522 YL singer in FF, OM ancr and YL talking rather friendly at 0523, YL singer agn at 0524. Sig destroying KRNT w/incredible het. (Vernon)
- 1375 -UNID Probably St Pierre on 10/31 at 0300 w/s/off anmt in FF, not clear on in followed by "Marsailles". Definite on freq and DF as per SM-2 seemed right. (Brodnky)
- 1376 -FRANCE Lille fair/good w/man in FF, het fm weaker St Pierre-1375, slop de WFEA/WDEA, 2247, 10/25. (Connelly) * Is by far the strongest TA consistantly here this season - they make it even when it is Auroral. (Cooper)
- 1394 -ALBANIA Tirana w/man in SS at 2314 on 10/30 interspersed w/militaristic choral singing. Talked about socialism in Latin America. S/off w/"Internationale" at 2326. (Brodsky) * Lushnje w/OM EE nx 2207, not nearly as good as 1457 although this one is usually hard better here, 10/29. (Straus) * Good w/ woman in Slavic sounding language, 2245, 10/25. Booming in w/excellent sig on Realistic TRF w/woman talking, taking out adjacent domestics, 2158, 10/26. (Connelly) * 10/26 2206 YL w/nx in EE, ID as "This is Radio Tirana", commentary at 2210. Talk at 2219, could not read the title, all by same YL ancr. s/off 2226. Carrier cut 2227 and 45 seconds, returned at lower level 2228 and 15 seconds w/trumpet IS repeated many times afterward. Excellent sig, though YL ancr not always readable. (Vernon)
- 1412 -UNID Violin mx o/SAH, 2230, 10/29. (Connelly)
- 1415.9-DOMINICAN REPUBLIC Unid w/"pambichao" mx 1003 11/1 and mentions of country.
- 1439 -LUXEMBOURG 10/24 s/off w/OM ancr 0245, femme singer, then anthem, silence by 0250. (Vernon) * Noted at 2228 on 10/29. (Connelly)
- -ALBANIA Durres ex sig w/GG nx as per WRTH, OM/YL talk 2204 10/29. (Straus) * W/big sig, first just heavy OC, then trumpet IS at 2227, 10/29. Something else, possibly England, way under. (Connelly)
- 1465 COLOMBIA Lebrija, Radio Palonegro ID and TC 0238 11/2, cumbias, weak. (Schatz)
- 1475 -AUSTRIA Wien strong w/Muzak o/SAH, 2226, 10/29. (Connelly)
- 1475.1-HAITI P-au-P, Voix du Peuple w/Creole speech 0934 11/1, so this one's back
- on the mir. (Schatz) 1529 -VATICAN STATE Strong w/cl and semi ol mm, killing WCKT, 2322, 10/26. (Con) 15%6 -tWID (possibly England) carrier, fragmentary audio, 2222, 10/29, (Councily) 1552.4-TUBES & CAICOS ISLANDO VSI here from 1548 freq shown as of 11/2. (Schatz) *
- Still here mightly w/Top 40 mx best 11/1 2300 w/"Dateline Loudon" nx. (Sutton) 1594 -FRANCE/UNID Definitely 2 carriers present, san talking, then soft as (barp) fast SAN (approx 8 hs), poor overall copy, 2220, 10/29. (Connelly)
- AS YOU CAN SEE, CX ARE EXCELLENT. IF YOU ARE DXING, LETS SEE A REPORT FROM IN IN THE NEXT ISSUE OF IDXD! LET EVERYBODY KNOW WHAT YOU ARE HEARING!!!!!!!!!!!!

1555 -CAYMAN ISLANDS Radio Cayman, testing w/variety of mx before 2200 11/2. No ID hrd. Strong, but audio somewhat distorted at peaks. (Schatz) * Per tip fm Gordon Nelson, R. Cayman was noted w/good sig w/anthem at s/off, 0140, 11/1. (Connelly) * Noted 11/1 0100 to 0503 s/off. Sigs good at times, peaking at 10/S9, some long slow fading; 80% of the time, very listenable even w/bandpass on HQ-150 wide open. 0200 voice ID "Here is Radio Cayman" by soft spoken female, 0300-15 BBC WS nx. Otherwise mx all "Muzak type" orchestral/some chorus of semi-cl, and show tunes. Het de Nice-1554 noted 0445 plus. S/off anmt 0500 "to return at 6 AM" and NA 0501-03, OC to 0506. Fade in 11/1 2250, BBC WS nx 2300-15, vy stable S9 sig, into mx. No anmts of mx titles/any DJ activity. (Sundstrom) * 2315 10/31 w/end of "Bulletin Board", address in Georgetown, anmt by YL in British accented EE. Into MoR insts. Also 1230-0305 11/1 w/end of rel pgm, into "Carmen" and other opera. 0305 anned "test transmission from R. Cayman". Vy loud, WC should have no trouble. (Hutton) * 10/31 noted w/vy strong sigs 2250-2345 w/cl mx, IDed 2305 w/mention of AM on 1555 and FM on 105.2. Excellent audio. (Schmidt) (Time in Dave's report is EST, ED) * The "piece de Resistance" of the week was the logging of this new country/stn on Sunday eve, 2245-2330, w/S9 sigs most of the timethey have lots of folksy local items, organ recitals, etc., much like USA radio of 3 decades back; and BBC nx at 2300, folo by local nx. (Cooper) * Had some soul mx on 10/24 0050-0112 w/vy poor modulation and unintelligible RE anmts. Ditto on 10/24 at 2320-2340 w/a live sounding folk mx performance. First definite reception was on 11/1 at 0053 w/cl mx and a clear ID at 0100 into the BBC Presents "My Music". Good reception on 11/1 at 2316 w/wx. dinnertime muzak pgm, comedy, and pop mx. This one faithfully IDs w/4 tones and anmt every hour and half hour. (Boomer) * Also had phone reports on this one from Ron Schiller in Texas and Linda Brodsky. Noted here w/excellent sigs on 10/31-11/1 2345-0035. There ain't much doubt they're on the air now!

1578 -ITALY Is this stn still on, used to be regular here in previous seasons, but unheard here this season. (Straus)

1602.6-DOMINICAN REPUBLIC Santo Domingo, Radio Femina now up here from nominal 1600. (Schatz)

One lone verie

-PUERTO RICO V/1 in SS for follow up. Said a survey enclosed but not there. V/s Reinaldo Royo, Jr., VP y Gerente General. (Mount)

The reporters for this issue

Bruce BOOMER - Nutter Fort. West Virginia HQ-180. 300* longwire Linda BRODSKY - Rosedale, New York R388/URR, SM-2, longwire w/tuner

Mark CONNELLY - Arlington, Massachusetts R390A, SM-2

Ernie COOPER - Provincetown, Massachusetts HQ-180C, SM-2

Marc DELOHENZO - Centerville, Massachusetts HQ-100, SM-2

Chuck HUTTON - Decatur, Georgia R388, Sanserino loop

Don KASKEY - San Francisco, California HQ-140X, SM-2

David KLEMP - Plantsville, Connecticut SPR-4, SM-2, 90' longwire

Albert LOBEL - San Diego, California DX150A, Sanserino loop, 2 longwires Paul MOUNT - Teaneck, New Jersey. TRF

Wilfred RITAYIK - Holly Hill, Florida HQ-160, SM-2, longwire

Ron SCHATZ - Miami, Florida R388/URR, LSCA-2

Dave SCHMIDT - New Castle, Delaware

Elliot STRAUS - Asbury Park, New Jersey

Tom SUNDSTROM - Willingboro, New Jersey HQ-150

Brian VERNON - Manibridge, Manitoba DX150A, 400° longwire

That is it. 73.



editor.. Wes Boyd 2699 W. Liberty St. Ext. Girard, Ohio 44420 216 545 4543

Hi group,

Hope all of you have had great DXing. I got a bit in on 11/3 for some "election coverage DXing", and noted 580 WCHS ANing, 940 WMAZ ANing, 1240 WBBW ANing. & WLKS 1450 Aning. This was at least at my check of 0345....

Had an unid u/ WVON/WFBL w/ Election stuff, but CHOO ANing ruined copy. TEST RESULTS:: 960 KLAD Hrd: (SF--MH--Starr--Silly--HWB--RBS) Not hrd: (TRS) 970 KVEG Not hmd: (Starr--KDF--Starr) Didn't even try! (HWB) Not hrd(RBS) 1260 WPHB Hrd: (MH--Starr--SF--) 1310 KFLA Not Hrd: (Starr--SF) 1450 WATZ Hrd: (Starr--Silly--HWB--KDF) Not Hrd: (TRS--SF) 1350 WNVA Tent.. TT only, no IDs (TRS) changes 1240 WJIM MI Noted 11/2 w/ CBS nx 0500, log sez NBC (Starr! 1310 CFGM ON MM SP ends 0545 w/ quick s/on..no anthem (Starr) *1450 WXVW IN Weekends runs RR oldies, DJ named Beth (Starr).. This is the UNID NITECAP noted by many, runs Mon.-Fri.--(HWB) 1470 WFAR PA This now is PROG-ROCK Mid.-6AM (Starr) 1490 WMGW PA Now is "24 hrs. a day" (Starr)

Starr noted CKKW 1090 playing "Blue Cyster Cult" the other morning, then went back to regular C&W stuff. Dunno the reason, but don't be fooled (HWB) ***Per WERE 1300 & WXVW 1450..Nitecap net is now AN MMs..(SF)

***WTNK 1390..verie sez r/c is dt monthly on 2nd. Thursday between 0200 & 0230. It's listed 0200-0215, but not hrd. some months..actual time may vary inside the 0200-0230 period & explain this. The CE is a BCB DXer!!!(Starr)

4th. WED: WCOW 1290 TT 0115-0130. IDs only at end (SF)

1st. MM:: WMTL 1580 w/ 800Hz. TT. ID start & end only, ends 0556 (Starr)

Now some newies, phoned in by Rolland Lindblade out in Omaha...

3rd. SUN.. 1230 WKLK MN w/ 1K TT 0145-0200 (monthly)

KOAL UT w/ 1K TT & frequent IDs 0215-0230 (monthly)

And a possible one..

4th. SAT: KSRC 1290..0200-0215 w/ 1K TT (first noted in Oct.) sunset & evening

540 WRIC VA 10/30 Haloween message, s/off 1845, weak (Dt. Tom)

590 KBHS AR 10/29 Good in WMBS null, 1945 s/off (SF)

710 WHB MO 10/29 In WOR null 1930 W/ RR & ID (SF)

730 WVIC MI 10/24 Fair 1844 w/ s/off, heavy WGN slop (KDF)

WJMW AL 10/23 Weak closing 1855, ment. channel 730 (Dr. Tom)

WMTC KY 10/22 S/off 1900, "Voice of Ky. Mountain Holiness Assn." (Dr. Tom)

WJMT WI 10/22 Good 1810 w/ wx & ads (Dr. Tom) 740 WVCH PA 10/29 Lush Instr. mx 1722, s/off 1729 as ending it's 10,436th

day of bdcstng., no SSB, O/ CBL (Starr) 760 WCPS NC 10/31 Strong w/ N.C. Net SX 1724, 1730 s/off (HJH)

780 WCKB NC 10/31 Political ADs & local ADs mentioning Dunn, lost 1759 to

Cuban..No JX hrd.. mx is mix RR/C&W/Soul (HJH) 860 KOAM KS 10/31 KS WX 1829 to syndicated relig., TC sez 7:31..??(HJH)

900 WCOR TN 10/27 Only call letters hrd. weakly thru mess 1915 (Dr. Tom) WATV AL 10/31 Black Programming, S/off 1815 w/ AMERICA by Ray Charles,

Had fair signal (HJH) 930 WIBL WI 10/29 Fair 1915 w/ s/off, ment. "Wis. Educ. Net" (KDF)

WJBY AL 10/29 Atop 1916 w/ s/off, as "J-B-Y..93", after WLBL s/off(KDF)

940 WMAZ GA 10/23 Fair signal 1900 w/ nx (Dr. Tom)

960 WTCH WI 10/30 Noted, poor at 1900, hrd. AM-FM ID (KDF)

1080 WOAP MI 10/23 Good 1854-1859, o/ WPOK w/ local ADs, C&W, s/off & SSB/

```
1170 WBRW NJ 11/1 U/ WWVA 1643 w/ local political ADs to 1645 quick s/off
       to return 0715. no SSB (HWB)
1210 KGYN OK 10/30 Tent. this in w/ C&W u/ WCAU. KOMA in well same time up
       on 1520.. time 1915 EDT (HJH)
     WILY IL 10/30 Fair w/ WCAU looped, s/off 1930 (Dr. Tom)
1250 WXOX MI 10/27 Alone at 1900 s/off, sez xmtr. in Essexville.no SSB(SF)
     WKBL TN 10/27 Good 1930 w/ s/off, ment. "Dependable signal"..? (KDF)
1270 WFUL KY 10/27 Fair at 1915 w/ s/off annet. (KDF)
1290 WHGR MI 10/23 Vy. Good 1900 w/ ID. looking for WNIL (KDF)
1310 WCCW WI 10/23 Atop 1901 w/ brief s/off (KDF)
1370 WCCN WI 10/29 Noted fair 1904 w/ farm co-op ad, Polka mx (KDF)
1380 WIZO TN 10/28 Fair w/ detailed area nx 1907 (SF)
     WNLA MS 10/28 W/ WYNK 1923 w/ OLE MISS FB promo, then 1927 s/off(KDF)
1390 KJPW MO 10/24 Noted thru WVON at 1931 w/ s/off (KDF)
1420 WSUH MS 10/24 Good at 1930 w/ s/off annet. (KDF)
1580 WLIJ TN 10/31 Hrd. fair 1930 s/off, must have forgot to set the clock
       back to STANDARD time (HJH)
     UNID ?? 10/31 Into nx 1900 by YL, call seemed WECM (HJH)
     UNID ?? 10/31 W/ RR & male DJ. s/off 1915..call seemed WMTS or WMCS.but
       what is a "W" doing on at that time?? (HJH)
     KLTR OK 10/31 S/off 2000 u/ KNIX.this must still have been on DST(KDF)
     KNIX AZ 10/29 Strong w/ local nx 1954, s/off 2002 (KDF) 10/31 In 1940
       w/ C&W & contest, fair level..(HJH)
1590 WNTS IN 10/29 0/ local WLTD 1900 w/ NNIS, then s/off (KDF)
midnight to sunrise
570 KLAC CA 11/1 Weak 0404-0407 u/ WFAA/WKBN w/ JX, C&W, & ID (KDF)
730 CJNR ON 10/27 Found this atop w/ C&W mx 0555 (SF)
850 WIVS IL 10/29 Atop WJW/KOA w/ ET-TT & sweeps 0230-0254 then several IDs
      in a row (Starr)
910 WLAS NC 11/1 S/on 0600 w/ ISSB (Starr)
960 UNID ?? 11/1 During & after KLAD DX, cont. SYRUP MX/MUZAK STUFF.
      Assume ET, off abruptly 0344 in middle of selection..hoozit?(Starr)
      I had similar till 0340 t/out, went back 0355 & 0400 ID as HJ--(HWB)
1170 CFML ON 10/27 Fair u/ WWVA 0723 w/ FF ad for something in Montreal(SF)
1240 WROV VA 10/31 Atop w/ RR 0400, YL dj named MITZI (Starr)
     UNID ?? 11/2 Someone 0303-0325+ w/ NIS, who?? (Starr)
     UNID ?? 11/2 Strong w/ NITECAP 0336-0357, List sez only KEVA (Starr)
1270 WTID VA 11/1 WT w/ various TTs 0055-0224, ID at 0059 & 0220 (SF)
1490 WOLF NY 11/2 A pest of the '60's, back LOUD 0400-0415+ w/ RR(Starr)
1560 WWBK NY 10/27 ET w/ MUZAK/OC 0415-0432 to ID & off.was u/ CUBAN(SF)
1600 WARU IN 11/1 S/on 0558, followed by ISSB (Starr)
   Now some call letter stuff:
                                  GRANTS:
Applications:
                                  980 WYOO MN granted WAYL
1360 KXGI IA seeks KBKB
                                 1020 KGBS CA granted KTNQ
1380 KUDL KS seeks KCNW
                                 1060 WOIO OH granted WQIQ
1580 WHEX PA seeks WCLY
                                 1340 KMEL WA granted KWWW
1590 WHPA PA seeks WAEN
                                 1400 WBOY WV granted WBBN
   And finally some Canadian stuff via John Oldfield..now in Vancouver.BC
570 CKSW SA is now here & RS
580 CHLC PQ has twin on 620 in Forrestville, PQ w/ 1Kw
690 CFRG SA now is RS here, // CFNS 860..on CBC FF net
860 CFNS SA now is RS here, // CFRG 690..on CBC FF net
790 C??? NS Application for 10Kw, replaces CFDR which is now RS on 680
810 CJVA NB is not/has not been/ in operation or on RS
850 C??? BC Abbotsford (ex: 1240)is on RS here..not // 1270 anymore..
910 C??? ?? Drumheller has new twin on 1400
    CKNS ON This (CJNR 730 & CKNR 1340) net is supposed to be off on MMs.
       but is AN-6. May add CJIC 1050 & CJWA 1240 to net..
1330 CKLD PQ moves to 10Kw here, ex 1230 & adds twin in Disreali on 1230
1470 CFRW SA moves to 10Kw on 1290...
1400 C??? NB Bredrickton granted 10Kw days/250 nites..EE
1570 C??? MB Application for 10Kw fulltime here (again!!)
REPORTERS:
OLD
       John Oldfield.. Vancouver.BC
       Rolland Lindblade Omaha, NE
RL
```

Hubbard.OH

Hubbard, Ohio

HO180 Loop

Zenith T-0

Starr Jerry Starr

Silly John Silliman



10

Steven Francis Karl 4th. Michael Hogan Harry Hayes Tom Sundstrom Ron Schiller DR. Tom Tom Williamson Wes Boyd

Alcoa TN Villa Park, IL Highland, IL Gouldsboro PA Willingboro NJ Dallas, TX Guelph, ON Girard, OH

HQ160 SM TRF Zenith T-0 HQ150 SPR4 R390A SM HQ180 SM/ DX150 LW HQ180 Loop Everyone I Ferget All-Over, USA, etc.



MIDLAND - PENETONG BROADCASTING LTD. 490 DOMINION AVE., MIDLAND, ONTARIO

LAS IPE

Later,

609 SECOND AVENUE SOUTH MINNEAPOLIS, MINNESOTA 55402

CLIPPING CORNER

All-News Radio Service THE HARTFORD COURANT Will Close by Mid-1977 Nov. 4, 1976

Service (NIS), the 24-hour also said alternate features tures. The service cost subradio news service operated are available. by the National Broadcasting Co. (NBC) for the last 16 of the NBC Radio Division, on the size of the market. nounced Wednesday.

ford's WPOP (1410-AM), an service and to support it all-news station, and 69 with heavy promotion, NIS WPOP's business has been other stations across the na- has not reached the levels of "dynamite," in contrast to tion, failed to attract enough station subscription or na- the poor showing by NIS. station subscribers with tional audience which would

WPOP officials refused ue. Wednesday to discuss the they wanted to study a state- service," he said. ment from NBC and consider the implications.

earth-shattering.

He said the station uses with 250,000 listeners. other material, including The service, which cost

By BARRY SCHIFFMAN wire services and local news year, provides subscribers News and Information from the station staff. He live news, sports and fea-

months, will go silent by said a year-end review mid-1977, the network an showed that "despite our with subscribers to phase out best efforts to provide an in- the service and help them NIS, which serves Hart- novative, national, all-news find substitutes. enough listeners, NBC said. make it possible to contin-

"There is no long term fuloss of the service. They said ture for NIS as a national

The service was started June 18, 1975, about two The station uses NIS mate-weeks before WPOP rial about 50 minutes per switched to the all news forhour, but station manager mat. Thayer said NBC want-Albert Pelligrino said the ed 150 subscribing stations loss should be "nothing that with 750,000 listeners, but attracted only 70 stations

news from the regular news NBC about \$10 million a

scribers between \$750 and Jack G. Thayer, president \$15,000 a month, depending

Thayer said NIS will work

Pelligrino also said that

by Ron Musco

FCC Receives No Response from Soviets— **USSR Radio Signal Disruptive**

CLIPPING CORNER

Mysterious Radio Signal Causes Static

Submitted by Ted Financial

out the world for months, according to sources on both

sides of the Atlantic.
The interference caused by the transmissions is so severe it has disrupted maritime, aeronautical, telecommunications and amateur radio to the point where some channels have become virtually useless Since Aug. 25, the Federal Communications Commis-

sion (FCC) has written four complaints to the Soviet nion, but so far there has been no answer.

What is generating the mysterious signals, what type, of intelligence — if any — they are carrying out and their purpose are all unknown, at least to the FCC.

What is certain, however, is the FCC has several tendred complaints and the transmissions are heard found the world.

racin visual — A super-powerful, mysterious racio, signal — apparently coming from the Soviet Amateur Racio Union, said reports have come from amount on the world for months according to the world wide to coordinator of interference reports for the International Amateur Racio Union, said reports have come from amount of the world wide to the world wide to coordinator of interference reports for the International Amateur Racio Union, said reports have come from amount of the world wide to coordinator of interference reports for the International Amateur Racio Union, said reports have come from amount of the world wide to coordinator of interference reports for the International Amateur Racio Union, said reports have come from amount of the world wide to coordinator of interference reports for the International Amateur Racio Union, said reports have come from amount of the world wide to coordinator of interference reports have come from amount of the world wide to the world wid Colin Thomas of Leeds, England, the worldwide

The interference has been referred to the Interna-tional Telecommunications Union (ITU) in Geneva. sources say.

A spokesman for the ITU said he was unaware of the entire matter but added the organization wouldn't make public anything it might be doing. He said this ITU has no power to enforce international radio treaties against interference but simply tries to mediate such

Nevertheless, another ITU source said the organiza-

tion does have a file on the mysterious transmissions.

King Hall, chief watch officer at the FCC's monitoring branch, said the commission has been getting com-plaints almost daily since early July. He said complaints

Boungstown Vindicator 19 Monday, Nevember 1, 1976

of interference reports for the aeronautical, telecommunicathe mysterious signals, what
tions and amateur radio operations to the point where
tions to the point where
they are carrying out, and
unaisswared questions, at least
to the FCC.
What is certain, however, is
that the commission has several hundred complaints and that
felecommunications in Mosto the Atlantic say.
So severe is the interference
caused by the transmissions
that it has disrupted maritime,
Precisely what is generating
the transmissions are heard
Colin Thomas, for example,
the transmissions, this we do not International Amateur Radio

know."
Thomas said all of his interference reports are sent to the understands that complaints have been telegraphed to the Russians. But, as with the FGC

answer. So severe has the interference become — and so unre-sponsive have the Russians been to complaints from other countries — that the matter has been referred to the International Telecommunications
Union in Geneva.

Rene Fontaine, official spokesman for the ITU, said he was unaware of the entire matter but added the organmatter but added the organization would not make public anything it might be doing. He said, too, the ITU has no power to enforce international radio treaties against interference, but simply tries to mediate

heresteles, mother ITU source and that the separate mysterious transmissions. He said correspondence had para-ed to the Russians through the ITU's International Frequency Regulation Board in connec-tion the matter.



Submitted by Jerry Starr

and come from basically every short-wave radio user.
"This would include aviation people for air-ground communications ... maritime users - ship-to-shore operators as well as shore-to-ship and ship-to-ship ... overseas point-to-point fixed radio services" such as American Telephone & Telegraph Co. (AT&T), International Telephone & Telegraph Corp. and RC Global Communications Inc.

Although officials of all three companies said they knew nothing about such interference, a watch officerat the RCA ship-shore station in Chatham, Mass., said several channels were completely unusable over the last week or so because of the interference.

At the AT&T station at Manahawkin, N.J., an operator said the interference had been bothersome for some

John Berber of Dunn Loring, Va., who operates amateur station K4DTD, said he was communicating with a ham in England this week when the interference came

on. He said it was a "super-enormous strong signal-... that sounds like a buzz-saw."

Hall said direction-finding equipment show the signals come from the eastern side of the Baltic Sea. Although at such distances radio direction finders aren't precise, another FCC official said the transmissions may be coming from the area around Minsk, about 300 miles southeast of the Baltic.

Those who have been around radio for some time have speculated on what the transmissions mean. Some contend they may be an over-the-horizon radar (normal radar operates only line-of-sight), while others say they may be experimental transmissions.

Another theory is they may involve communications with Cuba because this form of transmission first was heard as long ago as the 1962 Cuban missile crisis.

Although the National Security Agency normally monitors a wide variety of communications, an agency spokesman wouldn't comment.

musings of the members

tor: Ernest R. Cooper
5 Anthony St.
Provincetown, MA. 02657

The subsequence of the Principles are three of the Selfrator constant, and the

WALT BREVILLE - 9127 Coral Drive - St. Louis, MO - 63123 Happy new DX season to all! This one got off to a fine start for me, when I went to Louisville attending my first NRC Convention since 1969. I had a tremendous time, & I sweat that I'll be a much more frequent Convention-goer after this! The details of all the neat & fun things & happenings are too much to recall in this small space, save for one unique one. As an early arrival, I got in on helping a few LADS transport goodles to the motel, & wound up being the hold-down man in the back of Gary Atkins' 20-year-old pickup truck, an almost indescribable experience! With some wild luck, we made it, & Isurvived to come home & type this. The only flaw I can think of avout the Convention is that no one got a color movie of that truck in motion. At the Convention I bought an HQ-145-A RX from Jerry Bond, who sold it for a friend, & a large Miller power line filter, which turned out to be a powerful lucky charm. My power line buzz quit for good before I ever plugged it in! The HQ-145's noise limiter does a good job in taking care of the remaining few noise pulses. & the RX itself definitely out-performs the Drake SW-4a in adjacent channel selectivity. So far it really seems to be a good receiver. Latest DX here: 10/18- KWOA-730, Worthington, MN, 7:45 pm s/off. 10/19- KKM-730 Grand Prairie, TX 7:58pm. 10/20- KBUL-900 Wichita a/off 8:01pm after a c/w record. 10/21- WELO-580 Tupelo, MS 7:50 pm 10/25- WF80-900 Present OH 6:30am. 10/26- CKWS-960 Kingston, Ont. in w/aparing atrength clobbeting KMA 8:15pm. I am now a regular broadcaster on the airwaves, I have a mobile CB rig. If skip is occurring on CB about 6:15-6:30am CST, & you hear "The Stargazer" on Ch. 17, chances are it's I. reception reports are welcome here! Threes to all of youse.

DAVID A. KLEMP = Box 253 - Plantsville, CT - 06479
Well, after reading the S.O.S. for Musings in the last edition, I decided I'd better get writing. I've been very busy lately working towards a ham ticket, so I have been very musy of late. I received a wonderful letter from Carp. Ont. with some much needed ingo on my SPR-4. I must say the co-operation in the Club is magnificent! I also have a new friend in the outskirts of Boaton. I am expecting answering letters from bothso they know who they are! Ei! The band has been sporadic at best here, some nights great, others ditto. What else is new, hi. I would like to share any info any Club members may have on modifying the SM-2 amplifier circuit. It's noisy and has no gain 1150-1230k. Any ideas? I would love to use an F.E.T. circuit. Well, 73s & good DXing to one & all. I hope to put more time in at the disls.

HM2 MICHAEL S. HARDESTER - 559 80 7072 - Navy Department - U.S. Army Hospital - APO, San Francisco, CA - 96331

Just a short Muse regarding the KYME-740-TEST of 10/25. They were noted here @ 3:05-3:27 u/KGBS QEM which was on w/OC & later TT and varying pitches. No CW IEs or TT was noted from KYME, if used. Besides KGBS, a c/w station, & possible talk show noted occasionally. Also I noted an unID Canadian (presumed) s/off @ 3:02 w/announcement of returning to the air @ 5:30, then into GSQ & off, this 10/25 & on 740 as well. Looks like a fair season starting. As of late, I have been noting occasional OC on 845k, & lonce to level w/possible weak audio. This usually from llpm to lam or so. Possible ideas? Above logs were in Modesto, CA; above address is effective by the time you read this. New location will be Okinawa, Japan. 73 & best of DX. (And best of luck to you, Michael, and smooth sailing! -ERC)

BRUCE WINKELMAN - 3324 Kettering Place - Greensboro, NC - 27410 Greeting, fellow DX freaks! I had a very enjoyable get-together with fellow NRCers Ron Schiller & Ted Fleischaker Mon. 10/ 18 when both were in town for the Southern Furniture Market. Any other NRCers out there with connections in the furniture business and who may be attending the Spring Market, please drop me a line & maybe we can arrange another DX get-together. I especially enjoyed Ron Schiller's memories of the "Good old days" of DX & Ted's first hand report on the Louisville Convention. Sounds like I missed a good time. On to DX: 10/13- WEW-770 MO @ 7:22am w/ads, call ID & promos. 10/14- KONC-860 w/ T-40 @ 7:10am. 10/21- WCBC-1270 w/WX/mx & ad 6:48pm, then MoR. KAGY-1510 w/political ad 7:11pm, then faded up & down w/WLAC/CJRS, "Sermonette" 7:29, to 7:30pm s/off, no SSB. KNBO-1530 w/BFL mx 7:38 non-stop to 7:44 s/off to ISSB but not enough for a report. 10/24- WFIV-1080 w/s/off weakly u/WTIC/WKLO @ 6:37 pm leaving BFL mx that has to be WVCG but no definite ID. WISN-1130 w/Ai NX 7:04-7:05pm, then pop mx, mentioning "The new WISN." MM 10/25- WFUN-790 w/"79 NX" 2:56am staying & dominant. NSP? KYME-740-TEST not heard 3-3:30 durn it! Thassit for now. 73s.

BILL COLEMAN JR. - 114 Circle Drive - Rocky Mount. NC - 27801 I just added another RX, a Panasonic model RF-1150. This one's got a nuilt-in Gyro-loop antenna, & works real good! It's also got a CB monitor, & covers 540k-30mHz, also FM, & AC/DC! It features S-meter, & BFO, not bad for \$120. Can anyone provide me with the correct address for R. Jumbo-545, & do they verify? S/off time most every night is around 10:10pm EDT. They have a good signal here. I noticed WGIV-1600 is playing jazz mx, @ 1:15. Tests heard on Fri. 10/22, WJNJ Atlantic Beach, FL, on for XR adjustment around 1:52. On MM 10/25. I heard @ 2:25, WTFI, Dalton, GA on w/mx & test IDs @ 2:25. At 2:38 unID TT on 610; @ 3, WJJD Chicago on w/TT & ID 3:30. I noticed the ex-AN man who used to be on WCAU, Bill Corsair, is now on WTIC-1080 Hartford. He mentioned he was in his third week there! Wasn't that another one who dropped Mr. Jepko? (No. Bill. WTIC never carried Jepko -ERC) 4 43:48. unID TT (two different stations) on testing at the same time on 900. One ID was WLSI, Pikeville, KY, & the other still unID, anyone know? A check 2 3 & 4 on 740, only thing showed up here was KCMC, o/WKIS, & unID LA, a Colombian, who?, & low hetrodyne, also unID TT-590 @ 4:45. That's it for now, please remember the DX Chat Line, prepaid calls to 1-919-443-7282, from midnight to 3am daily, seven nights a week. I always appreciate any extra CMs, sound surveys, rate cards, just anything, so long as a station's call is printed on it! I'm a 100% radio freak!. Correspondence most welcome, too. Peace.

Well, how's it going, everybody? I hope the new DX season will be productive to everyone. From the indications I've had the past weeks.

I was very happy that I got WJMX. I've been hunting for that one ever since I moved from Florence in June '75. I also sent report. There's not been anything going on here lately except WEXI starting operation. The TRF still amazes me with its pickup of stations. I also like the way it nulls out other stations. One verie, that from WBAP. Totals now at 1362/50, 29/23, 1/1. Top five states are Florida 91, Georgia 52, Alabama 30, Tennessee 20, & South Carolina, 19. Well, that's it from here. 73s and good DX. V/s included. (Good! Thank you, Mike! -ERC)

MIKE KING - 6541 Avere Boulevard - Jacksonville, FL - 32210

WE RECIMMEND SENDING COMMEMORATIVE STAMPS AS RETURN POSTQGE, AND ALSO TO USE THEM ON YOUR OWN MAIL TO RADIC STATIONS. THEY MIGHT FIND A STAMP COLLECTOR THERE AND GET YOU A VERIE YOU OTHERWISE MIGHT NOT HAVE GOTTEN!

LINDA BRODSKY - 245-16 149th Avenue - Rosedale, NY - 11422

To answer ERC's query of 10/18, the matter with this

Muser is barely enough time to DX & report to the columns, let alone compose a Musing. In my view, to dimply recapitulate the info sent to Alan & Jerry's columns isn't really what a Muse should be & if we members report regularly to those, perhaps that's why we don't Muse so often. I see Musing as a chance to share info & opinions that don't fit in elsewhere. I'd like to hear from others on this. (I think you've got us confused with IRCA's policies, Linda! -ERC) Anyway, ERC's admonition got at least one NRCer off her veranda! CX have been varied in the early.evenings when I do most of my DXing. 10/20 brought an AU which was a little different here since ww stations predominated, rather than the usual Caribbean & EC LA's. I heard XEQ-940 @ 9pm & XEUN-860 @ 9:35, both for the first time. Also the evening of 10/27 had interesting SSS DX w/CKEY-590 @ 7:05pm, WVCK-690 AL @ 7:15 s/off, WCPC-940 MS @ 7:23pm & CKOC-1150 Ont. @ 7:30. TA's have been fair with Spain-683 @ 7pm on 10/26 & on 584 @ 7:50pm back on 10/14. Monaco heard regularly on 1460 but poorer than last season. Cacasionally Algeria-529, Albania-1457 & West Germany on 1586 make ealy evening appearances. 548 is virtually wiped out by R. Jumbo-545 which is a nightly visitor, even on my clock radio. R. Dominica-595 is better this year as is Grenada-535 & Surinam-725. Belize-835 is a sometimes visitor & it seems every Cuban on the island can be heard here. WAPA & WKAQ have been regulars from Puerto Rico. That's about all for now. Good DX!

ERIC FADER - 23-35 Bell Boulevard - Bayside, NY - 11360

Here's another AT-40 updater for your perusal. New 10/17
KBRE-940 UT, KGLN-980 CO, WCEN-1150 MI (delete same-market WINO-850, carrier current?) & KTOE-1420 MN. A recent "People" magazine had an NNISlisting - note the following changes: WERE-1300, not listed. Add these
to your log: KNWZ-1150 NM, KRNK-1530 WY, WEXI-1280 FL, WIBU-1240 WI,

KYXI-1520 OR, WSTV-1340 OH, WURL-1500 NC, all on NIS network. Why is
there an NIS affiliate in Dallas (WRR-1310) AND in Fort Worth(KRXV-1540)?
Isn't that the same market? More AT-40 info - new 10/24: KSIS-1050 MO,
WIZE-1340 OH, WRON-1400 WV, KMPL-1520 MO. Who is WFJA, Sanford, NC?
Also new 10/24. That's all for this edition. 73s.

RICH FRCHO - 1208 Hulett - Eastlake, OH - 44094

A brand new humungous Channel Master Quantum deep fringe TV-FM antenna has been keeping me busy DXing TV-FM this Summer, but now it's time for MW DX. CX have been good lately with decent noise levels & some good TA openings, to wit: 10/12- KMPL-1520 w/ID @ 7:20pm pulled from u/WKBW null; R. Monte Carlo-1466 & 7:45pm w/GG-like language (maybe Austrain?) & mx, ID & IS @ 7:59, s/off @ 8. (Mayve Bavarian? -ERC) He has been heard on 10/25-26 also. Langenburg-1586 sneaking through at 8:10pm, unID-545 strong w/reggae mx & announcer in strangely-accented FF. Probably Dominica, but no ID. 10/18- %ZIP-1050 finally heard w/ID in mess @ 6:36pm, WNRG-940 dominant in WGRP null w/c/w @ 6:42pm, FIA-900 @ 6:59pm w/s/off, KBOA-830 a big surprise atop frequency w/ads for Blythe-ville & TC, no WCCO at all: Time was 7:15pm. 10/25- CHTN-1190 BOOMING in atop frequency w/female announcer, WX, ID @ 2:01am, then rr, superpest WOWO off. I've tried for years to bag this, but never had a good NE opening: WKIS-740 atop @ 2:49am w/ID & Carpenters mx, KCMC-740 way down in mud w/c/w, ID @ 3:3lam, mentions KTAL-FM. I had to replay tape over & over to ID this. No KYME-740-TEST heard for certain on 10/25; I heard only TTs from 3:27-3:30 but don't know who. Also 10/25, R. Lighthouse-1165 @ 10:01pm fair w/gospel mx, ID @ 10:15, much KSL/WWVA slop. That's all for now. 73.

FOREST E. OSBORN - 202 North Jackson - Hooker, OK - 73945
Well, things are starting to pick up a little, DX-wise
in Western Oklahoma. On 10/7 @ 3:06am, WTAX-1240 IL in the clear w/local
NX by a lady announcer. At 3:20, KEMI-1400, NV, w/NIS, temperature of 72
degrees, & ID @ 3:30. From 4-4:46am, KUUU-1590, WA, w/hits of the 50's &
IDing as "All-Hit KU-16". At 5am, WTXX-1370 KY w/end of TT & ID. Then @
9:45 that evening, R. Jumbo-545 in good with bongo mx & NX in FF 10-10:14

(Osborn) then more mx. On 10/8 © 5am, KEOS-690, AZ, s/off by woman. On 10/11 © 2:25am, TT & ID as "KVOU-1400 on the air for frequency measurement". At 3, KGHL-790 MT w/TT & ID at end of f/c. On 10/12 © 3:30am, KRNK-1530 WY testing evidently with 10,000w from their signal. On 10/15 © 1:54am, XEP-1300 w/soft SS mx & ID as R. Trece. At 2:17, KRTN-1490 NM w/TT & frequent IDs. At 2:30, KATI-1400 WY w/local "Total WX Information". At 2:41, KRNK still testing; at 9:59pm, last past of song "Behind Closed Doors" & then s/off w/announced power of 5,000w but I missed ID (Any ideas?) On 10/17 © 8:57pm, I finally got VOA-1180 w/Yankee Doodle Dandy & ID © 9. On 10/20 © 2:04am, KEMM-1510, MO w/TT & ID. On 10/21 © 2:04, WHII-1570 w/TT & ID. On 10/23 © 1:30am, CJWW-1370 w/soft mx & then Saskatoon WX. At 3:21, KOKO-1450, w/tt & "This is KOKO, Warrensburg on the air for test purposes only." On 10/25, got to do a little SSS DXing & © 7:02, KLOV-1570 CO w/local WX. A 7:23, WIL-1430 MO, w/SID; at 7:54, KAFE-810, NM w/plitical ad for Frank Bond & then c/w. At 7:57, WAIT-820 w/ad for Ford dealer in Racine, then WX for Chicago & s/off, ID © 8pm. On 10/26 © 8pm, KGRT-570 NM w/Ai NX, local NX © 8:04, local WX © 8:05, ID as K-Great. On 10/27 from 1:16 to 1:30am, TT on 1290 probably WGOW, but only ID © 1:30 was unreadable. At 2:15, KITI-1560, MC w/TT & long ID at end of test. So much for what s-been-heard. I just got the new Domestic Log and it's great. 73 & the best of everything.

WAYNE HEINEN - 2603 Paseo Road - Colorado Springs, CO - 80907

Hi once again from the Pikes Peak DXer. We have our first snowfall & I only like it for quieting down the airwaves. DX since last time: For the log, KFAB strongest non-local 10/18 & 11:20pm. 10/22-KBCQ-1020 10:18pm. MM 10/25, semi-local KKAM-1350 1:54-2:0lam s/off now IDs only as "Kiddin' Country" & is c/w. KTFI-1270 1:0lam w/NBC NX & MOR. Later I noticed KFJZ off AN on ET/TT w/little WEIC-1270 sneaking through but not enough for report. KPDN-1340 on r/c-TT 1:17am. While looking for KYME-740 I logged KCMC w/snatches of WKIS mixed in. KCBS was on OC. About 3:30 I logged KERN-1410 w/QRM from WING (second Ohio regional this year, WAKR first). Veries v/l- KHOS-940, WDAF-610, WMIX-940 (Thanks, QaI R. Mann). v/q- KRKE-610, KFGO-790, KALL-910, KCMO-810. Moving 1,500 miles is sort of neat - it's kind of like starting all over again. Graig Healy will have lots of fin-with his REB! I am looking for an RX to tune down to 400k w/a low IF to let me dual-convert the RBB (Preferably one w/a low RF). If anyone knows of one or has one to get rid of, drop a line, please. That's all for this week & I hope you enjoy two in a row Ernie - we don't want you to los: practice at the keys! See you all in LINCOLN-77 - (F'll probably win the Heinen Award!) 73. (Hey Wayne, nobody won it in Louisville! -ERC)

STAN SHEDD - 1433 Fifth Street NW - Calgary, AB - T2M 3CL Not much listening here lately. It seems CX are either bad or I'm employed elsewhere. Last week the off-on switch broke. Naturally it broke in the off position, hi. Of course no one had a switch which fit the volume control in an HQ-150 so I now have a new volume control as well. The next day the phono jack actued up so I had to open up the patient again. You may recall I mentioned I had built a loop, but had felt that I would have to rely mainly on my 19 meter antenna (3/2/2 inverted V). Well the loop works well in spite of all the steel in the stucco. However, it does some weird & not always wonderful things. For example, on 1120, if I point it SE I get a good readable KMOX & if I point it SW I get a good readable KPNW. But in other cases a station may not null at all. Or it may come in at the wrong bearing & drop very noticably at the ric ; bearing. Moreover, there seems to be no pattern to whether it works as a loop should or not. It may null a strong signal & fail to null a weak one or vice-versa. It may null a ground wave but not a sky wave or vice versa. It may null a ground wave. However, I must admit on net it is clearly better than the inverted V. That is a pleasant surprise because I read somewhere that loops would not work in stucco houses. I would appreciate hearing from anyone who has had experience with loops in stucco houses. 73 to all. (Try a stucco loop, Stan! Hi -ERC) KEEP THOSE MUSINGS ROLLING IN, FOLKS! THE MORE WE GET, THE BETTER! -ERC

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KEN CNYSCHUK - 16771 Shea Avenue - Hazel Crest, IL - 60429

Greetings to radio bugs everywhere. I didn't hear 10/25 TEST from KYME. I had the rx on during most of a hour, but nothing but splash from WGN. I tried a little while from 3:15-3:20 on 1590 for possible KUUU, but pesty WAKR atop. A little bit of 1000k for possible KOMO. UnID weakle in background about 3:25. Powerful TT in 1200-1300k range during & hour, but I couldn't even get an ID from next door station to know where I was at. Bleary-eyed me, hi. I went to Chicago Stadium Sat.10/23 for Bulls home opener. Driving (for the last time) back, It must have been a Class "A" AU night. A real surprise on portable RX, I heard ID of WAPI-1070 AL @ llpm carrying Birmingham-Indianapolis WHA game. Oddly enough WIBC-1070 also carres Indianapolis WHA games, but because of AU, WAPI came in fair, in/out. I barely caught end of NBA Boston-Milwaukee game on weak wBZ about 11:15pm. KOA-850 was wiped out carrying NBA K.C.-Denver game. Sun. night, 3WE-1100 Cleveland in beautiful as usual w/Cavaliers vs. Abdul Jabbar's Lakers, after 8pm. I have ordered 1976-77 NBA Guide so I should have the complete radio network soon. Andy Kwiatkowski is in Mercy Hospital. 2510 South King Drive, Chicago IL 60618, room 1007 for treatment of a head injury on 10/3. I sent him a card. A Zenith clock radio in the house broke the dial cord so I sent it to my sister-in-law's husband for repair (he's in electronics & CB). So, with only the Realistic working I picked up a Lloyds solid state AC/ DX 12 transistor at a garage sale last week. After testing it, it seems to be 90% as sensitive as my disabled Panasonic was, so I'll use that for DS purposes. Sun. 10/24 PM, after local s/off @ 7:15 on 95J (WJPC-950) I tuned to 950 for a piece of WMIX action, but no WMIX, just a solid WCPC MS till s/off @ 7:30. Oh well. I'll soff for another cold, blustery week. Our last snow, 10/17, lady at the local food store had to ask me if I ordered the white stuff. Funny. 73.

JERRY STARR - WHOT Radio - Youngstown, OH - 44505

Some good news, some bad. First, the bad: WSUM-1000 has returned to the air with basically a religious & gospel format so 1000 is again shot in the area. (One of the best places to be shot! -ERC) By their s/off, WCFL is rock-solid. The good? CX have been excellent especially with some unusual Canadian openings the past few weeks, regular visitors have included CKMP-1230, CHVD-1230 in FF, CFJR-1450, CFCN-1060 & the new CKNS-930, Espanola, Ont. relaying CJNR/CKNR (the listing of a CJRN // in the 10/18 DX NEWS musta been a typo), CKNS has a blockbuster signal nightly & has been leaving their OC on AN. Another new Canuck has been strong on 900 o/u CHML w/c/w & only giving IDs as CHMM, Stereo 97, in Wilnepeg, evidently the former CJOB-FM, must be a repeater with considerable power. I haven't any record of a CP here but it's here, report sent c/o CHMM-FM but no reply yet. 10/14- I found KRAD-1590 o/WAKR w/announced PoP 2:17am. 10/18- New WCRJ-1530 Jacksonville ETing w/50,000w DA per announcement, I don't think he's on RS yet, heard 1:40-2:17 s/off. 10/20- WFMT-1450 dominant most of AM w/fine arts programming. concertos & symphonic stuff, WFIX-1450 in theretoo w/r/c-DT 3:11-3:15am s/off. 10/19- KUAT-1550 3:11 & on w/annual PoP and super S-9-plus signals - itwould bake a great TEST for those who need AZ. (And for those needing KUAT, hi -ERC) Recent veries: WATZ-1450 (w/info of ll/1 DX TEST) WGET-1320, WMPX-1490 & SURPRISE, KRGO-1550 w/very friendly reply, all these v/l. Ted's comments about Falls City Beer and Fig Bars in the Convention article are all too true; John Silliman is still a light tint of green and lived for several days thereafter in his room with the funny furniture. Well, enough good space wasted. 73 and good DX. EV-ERYBODY Muse and join the CFC: Thus Tub can only be as good as each of you makes it with your participation. Maybe/a Bicentennial gesture even Krejny will Muse? Question of the Hour: Will there be a YAD-77???

RON B. SCHILLER - 7657 La Bolsa Drive - Dallas, TX - 75248

Veries in from KOCA-1240, KDDA-1560, KWRG-1500, & KORG-1120, all v/l. All but KWRG also sent CMs. Recent doings: 10/23, unn WQSA-1220 atop @ 6:04am, hi, NRCer Brock Whaley of WQSA! Unn CKCK good @ 6:30 on 620. Then two long-wanted, never previously heard in the East

(Schiller) by me. WESC & KOWH-660, former good o/XERPM w/c/w 6:26-6:38 am, then KOWH s/on 7:01 & into gospel. Needed wKBL-1250 @ 8:08 but quickly faded. KBC2-1020 giving ID as "Q" 8:21-8:33. 10/24, KBHS-590 o/KLBJ 8:26-8:31. lotsa local ads & quartet mx. I copied a couple of semi-locals in the PM. li'l KCLE-1120 & KPLT-1490. 10/25, up for KYME-740-TEST, TT heard u/KCMC/KCBS but no ID circa 3:28. Me too, thanks to Wes' tip, KRGO-1550 w/AN c/w 4:16-4:23. Two stations noted on 650. topper was an SS, latter seemingly KORL. That PM, KECK-1530 with excellent signals 6:39-6:47 & heard often since. 10/24, I forgot a pair of Louisiana s/pns: KWRG-1500 @ 8, & KCTO @ 8:17 mentioning c/w format. 10/25, I took a log on XEMO-860 EE religion, w/IDs every 15 minutes, tremendous signal. That PM, seemingly KTLU-1580 s/off 7:45; then, first time heard & with powerhouse strength, XEVIP-1560 Lexico City, all EE (except one ID), all-MX at the time I heard 'em, CBS feed & many IDs for U.S. products, 8:17-8:33pm. Then, the one so many heard on ETs, KRNK-1530, Cheyenne, in WCKY's null 8:33-8:41 w/NIS. Couple unns not heard in years, WESY-1580 @ 7:25 & KFDF-1580 s/off 7:45. 10/27, 1kw KJEM-1530 u//dcKY @ 7:30-7:45am till KECK s/on. A whisper of KLCV-1570 as they s/on @ 8 u/ XERF/KTER. PM: KGTN-1530 w/TSN NX till 8:01 s/off. KBBB-1600 8:09-8:15 s/off. 10/28, a pair of Louisianana vying on 1600, KFNV Ferriday & KNCB Vivian 7:45-8:25am. WWUN-1590 o/KYOK et al @ 8:10.

RAY ARRUDA - 48 Woodlawn Street - New Bedford, MA - 02744 The last week of October & the first few days of November have been quite good for me DX-wise. Stations W of here have come in w/ good signals several nights & I've come up with some decent catches in this early season already. Here is a brief rundown: 10/27-7:14-7:15 pm, WEYY-1580 w/s/off & mention of day power. 10/28- KRGO-1550 first time 1:17-1:20am w/end of c/w folo by TX & ID @ 1:19, deep fades w/no WOKJ after CBE s/off. Signal was completely gone by 1:30 so not enough for a report. Over to 1580 where WJVA was ETing 1:35-1:55am w/TT/OC/IDs well o/WCLS. WHWH-1350 3:25-3:37am w/Jepko, but third on channel to WKLX/WSLR. Still on 10/28, but PM: WCAR-1130 mixing w/WNEW w/NX & one ID from 5:50-5:55. WLIJ-1580 was noted twice here this past week: 10/28 s/off 7:17pm, & again on 10/31 @ 7pm, both times no NA heard, signal quite poor. TEST results: 10/25- KYME-740 TEST was previously reported as not heard, but after checing tape several times, a series of weak short tones sounding like two or three consecutive code IDs were heard very weakly 3:15-3:20am. A tentative has been sent. MM 11/1, all five TESTs were tried & only one made it: WPHB-1260 came through atop channel 2:40-2:46am w/TT/IDs & variety of mx. All other 11/1 DX is in Wes' column. I'm somewhat surprised at how KRGO's 500w is being heard at such great distances during hours of darkness. Maybe KBOZ-1090 will be widely heard later on in the Winter months just as well. 73.

KONSTANTINE RYCHALSKY - 22 Carroll Court - Bridgeport, CT - 06607 The whole world is transmitting & DX here is not Congrats to ERC for verie #4,000 - that must be some worth bragging. collection. Recent reports sent to CKAC & WQQW (both second timers). Recent returns: WMMW-1470 v/1; WILK-980 & CKEC-1320, both v/q. I missed TESTs for WSKW & KYMN. Golden Slumbers overpowered me & I DXed my dreams instead, no catches, h1. However, I did catch WFIF-1500 CT testing @ 12:33am a few weeks back. I called the next day, & the secretary told me that it was indeed they broadcasting & they are licensed to do so. I wrote the CE for more info for future tests. I recently received FCC Information Bulletin for Radio Station & other lists. It lists all the pro publications. Does anyone have tape of WFTL's Bermuda Triangle Talk Show's mysterious phone call? I will swap for WNAB's Lundly Street Home Mysterious Happenings program. I started experimenting on recording SSes to make this DX season one to remember in the sdven years I've been DXing. Break a leg. & 73s. (That's stage lingo, Konstantine - are you an actor? -ERC) DO YOU MAKE YOUR NEXT YEAR'S VACATION PLANS WELL IN ADVANCE? IF SO PLEASE C NSIDER INCLUDING A THREE-DAY VISIT TO THE CITY OF LINCOLN. NE-BRASKA, OVER THE LABOR DAY WEEKEND, FOR THE NEXT BIG N.R.C. CONVENTION!

KELLY ANDREWS - 3417 Chalfont Drive - Richmond, VA - 23224 This week marks the first anniversary of my renewed in-

volvement in DXing after about an eight-year lay-off. Being a confirmed verie collector I ve been going back over my records for the last year and would like to ask for some help. I never send a report unless I'm sure it offers unique, positive proof of reception and always is typed with return postage included. Yet even some stations that have shown up on the v/s list have been hold-outs. I'd like to run through a couple and see if anyone has some suggestions. First are the DX TESTs for the last season, WNMT & WJIC. Did these ever QSL? Next is the group that has received f/ups: in some cases even PP/c's: WEEP, WEZJ, WOAY (pp's), WAKY, KFVS (taped report as f/up), WCLN, WTQX & WERC. In most of these cases I think they ve shown up on the v/s list. And lastly the stations I've heard verify that I've reported to with no response after at least six months: WCLN, WSHN, KATZ, KKAA, WGBS, WEDO, KOIA, WSAR, WKEG, WPUP, WAPI, KRVN, WDRC, KSFA, WXTN & WCAR. Can someone give me recent v/s for these? Any help on thoese would certainly be appreciated. Please, no one take this as a blacklist by me. I realize the demands on a broadcaster's time and energies and QSLs certainly aren't a priority. All I want to know is if there is a friendly soul at any of these stations who might be of help. Thanks in advance for any assistance. Back to DX next issue after I finish cleaning up the book work from this past/season.

PAUL MOUNT - 471 Emerson Avenue - Teaneck, NJ - 07666 Continuing from last Muse, here's more DX & notes. 7/19 was just abour a washout, only WICK-1400 PA noted w/"The Dieso Machine" show 7/24, KSL-1160 in well w/ID taped & 4, surprise considering **ë** 1:29. Summer. Not to let one DX meeting be enough for July, Sun. 7/25 I took Palisade Park's Mort Kasday to former member Hambright's Denville NJ house. We were joined by Malcolm Kaufman, Michael Maghakian, Martin from Coop City, Chris Hansen, & a few others whose names suddenly escape me, & the pictures aren't back yet. Highlights of the day included watching the local access talent show on the local cable station, a cookout in his monstrous (big) backyard, the frisbee game, Malcolm's tapes of British radio & DX, & my Hollywood Squares & Saturday night tapes. I did a band scan here, the fact of being about 25 miles W showed in reception of some PA stations not strong enough to be heard in Teaneck days, like WVPO-840 WEEU-850 WFLM-900 WBAL-1090 WYNS-1150, someone u/WLIB, WANN suspected, someone u/WFAS-1230, two on 1390, one WEOK, other probably WLAN, two on 1460, WCRV-1580. Then again, the westernness still allowed reception of stuff like WINE, WELI, WBZ, WGLI, so it's all there. Strongest stations besides NYC are WBRW-1170, WQTK-1310, WMTR-1250, WERA-1590, WCTC-1450. DX from MM 7/26- CKTS-900 calling self R. Bishops again w/rr, no, this is not the Vatican. That's all there. 7/28 I got to finally recounting my totals. This system consisted of making only one list, stations heard in Teaneck, those not at my house marked *. No more 25 miles list, & any station I'm not totally sure I heard I didn't count. The philosophy is sort of "I'll just wait till I hear it again, I'd rather be sure I logged them, I'm not in that much of a hurry to add stations." It took all AM to write down the stations in chronological order, & it was a good listing, but like any large (?) list, some were deleted, like CHML-900 pest, or WMTR-1250 a local, which was listed as taped & verified but not heard. Totals come to 413/34d/6/10 heard, 150--lus/24d/4/8 taped, 212/33d/5/6 verified. 73.

CURTIS D. ENGBERG'- 80 Concord Road - Wayland, MA - 01778 Incredible! A month since I Mused last, and hardly a night has gone by without some TAs blasting in. Yet in all that time not one that I can positively ID as a new log entry! Almost every TA channel has had a readable signal at some time or other during the month. 10/10- One of the strongest nights for TAs left me with three channels with unID audibles that I'm sure would have been new additions to my log: 539, 1106, & 1475 (not Austria). After midnight, 10/11, a strong female singer on 1538 also new (Ya gotta watch those strong female singers, Curtis, hi -ERC). 863//836, 539 excellent. That eve 6 8:30pm R. Prague ID on

(Engberg) 1286 and into EE NX. At 9pm, 1602//1586, & Italy-845 coming right through WHDH! 10/13- At 12:05am KFI "at 9:05pm" u/LA SS & Cuba OC. 10/18- HJAJ-750 alone 7:50pm. CMJL-740 ID 8 8pm, YVKY-710 o/WOR super-strong SS on 698 o/WLW. 10/19- At 7:55pm SS on both 895 & 705, unID: 10/25- Another super TA evening. At8pm, FF NX on 1475, excellent to 8:03, then gone - Dahomey? At 8:06, 1106 very good again. 10/26-At 8:10pm, 827-AA//818. 10/30- Excellent piano mx on 566 @ 6:40pm, un-ID. gone by 7. 10/31- SSS domestics yielded several good unns. At 5:05 pm, WCTR-1530 o/WUPR SS mentioning PR. At 5:15, WKYB-1000 & WIOO/WIQT all IDed in short order. At 5:30 WDMV-540 s/off & WSVA-550 atop w/ID & then into Redskins FB. 11/1- CX sharply changed w/LA dominant. Then at almost 7pm, "Strangers in Paradise" heard on 1555 very loud folo @ 7 by ID, "This is R. ----, Voice of the Cayman Islands" for my first new ID in a long time. 73.

DICK TRUAX - 3003 Gleson Lane - Louisville, KY - 40299 It's been a while since I've hit these pages - main reason is because I've had nothing worthwhile to report. Neverthelsss. I shall list the four newies bagged since the Convention beverage. On 9/12. WBCU-1460 S.C.w/ID & NX @ 9pm on a crowded channel. How many noticed WGGA-550 GA on 10/24 @ 10pm on 535 w/CBS Mystery Theater & ID, but no sign of them on 550? I got interested in the plot of the play & listened for 35 minutes! If the KYME-740-TEST was on it couldn't make it through the WAKY/WHAS spur on 740; did anyone log it? 10/28- KSPR-1590 AR s/off @ 7:45pm while looking for more exotic DX. pm 11/1- WPHB-1260
PA in nicely w/TT & IDs early @ 2:27am easily w/pest WNDE on, KLAD-960 OR in fair to good w/march mx but I had to wait for a loggable ID until 3:22am due to a potent WERC superpest. No sign of KVEG-970 NV TEST due to WWSW/CKCH combo killing the channel. So you can see 1 have been at the dials, just not very productively. Local WXVW-1450 is now carrying the Jepko trips on MMs at least, possibly during the week though I have not checked them. I have a neighbor who has an HQ-140X for sale, asking \$130.00 for it if anyone is interested, and it is still there Let me know & I will negotiate for you. It appeared to be fairly clean & unaltered. I'd buy it if I had space for it. More as it trickles in.

ERNEST R. COOPER - 5 Anthony Street - Provincetown, MA - 02657 Two veries, v/q from ZNS2-1240 & PP/c from WYNX-1550, for 4,006. WYNX is Georgia #148 for me, & ZNS2 Bahamas #2, a very attractive picture v/q. DX: Fri. 10/29- UnID TT/OCer on 1570, first noted @ 12:45 - they seemed to ID @ 12:54 & continue TTing, but missed. Anybody catch this one? Then on 1530, making WCKY jump (but not for joy) was another tester w/TT & OC, 1:11 & on, no ID & 2am, & still on @ 2:30.
And, a third mystery TTer on 940, very strong, 1:33-2:36 & on. A very
frustrating morning: SM 10/31, Hallowe'en, and several had the famous Drson Welles' "War of the Worlds" on, like WOWO-1190 & WFEA-1370 1-2 EDT. Somebody on 1560 w/MoR 1:51, & CBS NX @ 2 - I think this is my NNV XEVIP. Anybody in the NE needing CHIC-790, he's easy if you're out from under WEAN. They also had W of the W 1-2 EDT. Then, as we re-lived the 1-2 hour, this time on EST, we found nothing new. Odd thing was our time was the same as in Chicago for this hour; while the hour previous, our time was the same as in Halifax! That peeyem, I decided to see if any daytimers forgot to go off an hour sconer, when I stumbled onto a loudie on 1550, and it turned out to be the brand new Cayman Islands Broadcasting Service - this one will be an LPC for just about everybody! They were logged 5:48-6:30pm; their time is the same as ours, EST. MM 11/1-WFEA-1370 off today, so it may be the first MM is their SP, as they were off on 10/4 also. WHDH's-850 carrier as off this AM. Unn WIRA-1400 on top @ 1:19 (Fort Pierce) & WFTP-1330, same town, like ten tons too. TTs on 1060 & 1070 around 1:30, unID. Old friend KFI-640 in @ 1:35, also HJBJ-640. La Voz de Santa Marta, but too weak to log (they, that is). In looking for unn WPHB-1260, I noted a strong SS on 1250, of all places, so I took a log & the ID was "Emisora A-B-C" en Barranquilla, which is HJOK, listed 1 kw, but he sure sounded stronger than that! 11/2, Election Day morn - SW on 605 seems to call itself "R. Nacional." Another try for a verie from P Eco-940, HJGB. Cal 1, loud o/WINZ 2:42-3:05. CUM

Time to
but heard ab lutely not
that! One ing of int
with signal most equal
thought I'd ve 1210 a
have been KG . I'll g
anything. other mat
great. Bec se of its
in. If no e mentione
bottom sub-t le are in
Domestic Log s better t
How so much formation
I see my WGNL-1550 NC from last season is non-existant in this volume.
Is it now WBZQ in Greenville? There don't seem to be to many DXers
this season doing SSS DXing. What's happening? This is the time when
some really fantastic logging opportunities are possible, especially for
Easterners.

NEW MEMBERS

- * Lexington Smith (VASUOI), 55 East End Ave., Apt. 4G; New York, NY 10028
- * Charles George, 6407 Howard, Dallan, TX 75227
- Robert A. Curtis (WHEXZ), 17 Cobbleview Dr., Colchester, VI 05446
 Rassel Minthorn, 816 S. Visteria Dr., Melbourne, FL 32901 (re-joins)

RENEWALS

R. J. King, C. Veshburn, Robt. Fischer, A. Gibler, H. Sebelle, C. Objic, John Johnson, D. HoMurray, J. F. Porto de Silveire, J. Critchett, H. Steward, F. Zenk, J. Hegen.

FLASH TIPS & SUCHLIKE

Low Suchler notes WFHS-1260 hrd 11/1; KLAD-960 also. The former had a fair signal, the latter a week one. He passes on the info that the tester hrd before WFHS was (in his area, at least) KFGQ, Boone, IA. Ton Sundatron and Son Museo both report hearing WFWG-1450 on 11/8. Fon did not hear WEEN, Son didn't mention.

NOTES &c FROM NJPC

We are now out of print on the MRC ANTENNA MANUAL. If finances permit, we will be revising it and re-issuing it in the Spring. Likewise, we hope to add a 2nd edition containing articles run in DEM subsequent to the first manual. Ray tuned for more details.

We hope to have a new MSC HAM OPPOUTORS LIST available within a few weeks. It will not be run in DIM due to its incressed length, but rather will be available by SASE from EQ.

Don't forget to order your copy of the 1977 WORLD RADIO TV HANDBOOK at the special club rate of \$8.45. Deteils may be obtained from V44 #3 p18. Order from the Publications Cepter.

WE GOOFD : We forgot to include postage costs in the info on the <u>Travellars' Redio</u> <u>Directory</u> emponement in V44 #3 pls. The book cost is \$1.00 to mashers ordering thru the Publications Center PLUS 50¢ postage and handling (mailing to be done by FED), so that's a total of \$1.50, which is still \$ the list price. Don't delay ! MOTEBALL RENORIES

XXXII - HOSTALGIA DEPARTMENT: THE HEC IN THE EARLY SOS.

-by ROM SCHILLER Here are some 'extracts' from members' Musines in the early 50s: New Zealand's Ken Nackey reported a verie from the WSKI-1240 Dx TEST, and they're in Montpelier, Vermont! All-nighters were THEN a center of controversy, Ken Waylath of the Croton (NY) DX Club condemning the Allers & Ontario's Bill Stone defending their right to run AN. The CPC, then headed by Sid Rosenbeun, who incidentally was Protestant, had 96 TESTs arranged one year, including stations in the Canal Zone, Chile, and 16 from Canada. During Hurricane Edna, Iowan Len Eruse heard New Englanders on late - WWNH, WHET, WHEE, WHAY, WOTH, WORD, WADW; and Delaware's WJWL! Fred Van Voorhees' Foreign section published lists of foreign delinquentd & subsequent w/s for same. John Alexander of MY State not only won the Foreign contest one year but reported hearing seven Brazilians one March EVENIED! Sectile's Roy Millar reported his minth East Coast graveyard station, WOOR-1230. Pat Railley complained that he had 33 reports still unanswered. Fiji Islander Vill-930 was beard by DXers in PA, VA, & NG. Maryland's Steve Johnson noted he'd gotten 140 veries but had 103 reports still out and "veries coming at a very slow pace". The Musings Editor, who then was known as "Lefty" Cooper reported hearing KING-1090 for his last unlogged 50-kwer. A 400-watter in French Forocco with the call wIND was widely heard in the U.S. Connecticut's Hal willians received his 1.436th verie; Maryland's mank solorook got his 1,541 st, of which 42 were over 5,000 miles! A Tennessee DXer had over 2,700 veries, and is now unfortunately incarcerated in a Federal pentientiary. C.K. Stanbury beard a shrim boat on 2158 kg/s. from Dry Vortugas. The CPC got allers WEDC & WTGH to "stend by" for DX TESTs and nembers were urged to write thank-yous to them! Stan Mores logged WANW to keep his Indiana log 100% complete (from Massachusetta!) Len Kruse's "condition of frequencies list showed 620, 730, 890, 990, 1200, 1370, 1430, 1550 & 1560 as completely clear! WJLD-1400 got four New Zesland reports on their DX TEST! The bulletin had a TV section edited by Oklaboman Hank ward but that was later dropped. "THE" Log was published by Carroll Wey-rich and it was 120 pages, B"x11" notebook-style including all of Worth and South America. The Croton (NY) DX Club was comprissed of four to eight guys (at different times) who pooled their loggings and veries.
They beard three or four "Down Under" stations including 4MK & 2VL!
Yours truly DXed first with a five tube Eslliorafters 5588 and later with their eight-tube S40B. On the forser I was able to hear KNOG-1340, Nogales, AZ, & KGLM-1340 Glenwood Springs, CO, from New Jersey. The latter set produced my first WC graveyarders in KPKW-1340 Fasko & KBRO-1490 Bremerton, both in Washington State. If we'd only had today's equip-MEXT WEEK: SOME MORE OF CARROLL SETH'S I'.R.C. PORTRY.

CLEVELAND BROWNS' FOOTBALL RADIO NETHORK

	from JIM WALLACE.						
Station WSOM- 600	Market Salen L	red by:	Station (LEC-1450	Karket Sandusky	Fed by: 7EOL-FM		
VEOL- 930	Elyria W Greenville	WST-FM WSON-FM	#JER11450	Hewark Dover	Line from VSON-FH		
WWST- 960	Wooster L	ine from WHK	WBNS-1460	Columbus	WCLT-FM		
WBBW-1230	Youngstown	WBON-FM WBON-FM	WKRN-1490	Marion	Line from WWST-FM	WHE	
	Zanesville Darton Ph	WCLT-FM one coupler :		Zent	VBOK-FM		
	Ashland			Bucyrus	WWST-FM		
	Kanafield Cleveland	WWST-FM Flagship St		Akron	Line from	WHE	

WE WANT TO SEE MORE MUSINGS, POLKS! WHY MOT DO IT RIGHT NOW WHILE YOU ARE READING THIS? BE SURE TO DOUBLE-SPACE, AND REFERENCE YOUR LIMIT IS 30 LINES OF DX NEWS SPACE. TELL US WHAT YOU'VE BEEN HEARING BY DATE, CALLS, AND FREQUENCY. AND WHY NOT SEND IN ON A SEPERATE PIECE OF PAPER YOUR LATEST VERIE STONERS? WEED OUT THOSE WHICH HAVE RECENTLY APPEARED.

_3_I_G_N_E R S VERIE Ħ. Titchim, CE A G T O -/REN L Yazell. CE KCR Johnson W L C K W E Harston, E KSFO Hunter. CE KTUE BK Barker jr., 👊 C FuC B Humber WAIL BL Bach. GM WDB0 Shermin. K YoA u/u KCMX St. Martin.Trf A K GoI L D Mandelbaum, B KUBC Tessitore, PD 1270 K C O K K В Munger, P B J R Thomas, CE WZIL W IQB W u.u В 1290 K M J Schneider, CE В Ewald, CE A AOR M C T Morgan, CE WCOW Rice, P 600 KCLS K Brown, GM KJEF В Bailey, CE G 610 KFRC 1300 P L Waegele, CE R M Kanner, CE В KYNO В E 1320 W GmE T L M Blair, CE WDAF J F Schmidt, CE \mathbf{M}_{1} K GmA K K TQA R W Green. E В Ramsey. COp В 630 1340 R K HqO W P Montoya, E Ε Martin В HAK 640 K FqI CVI Ellis. GM Koval. CE C 710 KERE R T Simpson, PD В E GoB D G Peluso. CE В T H White, E (A J Williams, P WZYQ KOTTA H C Fisher. CE K Gon C В 1380 720 K D W N D Lesmeister (R F Stones, CE В K B W D J D Laird, TSu GΪ K OqB u/u В WISK R E Lashley Jr., GM I 780 NJAG Larson, PD W FqM J S Raymond K OuS Y W D Wilson J M Mason, CE KNCK Ι 1440 KUHL K AOB C Sterman, CE В J Ranger В JOHA Snively, CE KEWI W A Nelson, CE В WTSA W S U Z A R Bothmer, PD Н M Halperin. A 810 CKJS WREL Ravenhorst, CE C \mathbf{N} East, CE G 1460 W L Thompson, CE V HQA S u/u В W CcM B D C KqV L M Rousseau В WMMW J Richards, PD S W Colley, CE K FqU O J Fischer. CE 1480 KWIZ WRUF EASlimak, CE ΗJ 1490 KYCA D Harrison (K RuP T) H B Gilstrap, OpM 1500 WGUL Adkins, PD I KOAM KWRG Ryburn, AE Louise Gautreau.AM I K BrI F Dean. PD В KYKR Love. OpM 910 K RpY T D K Brown, APD кјјј Burke, CE CKDR Syrja, M KRGO Glenda Guthrie 920 WIRD R Mack, DoOp WVAB J H Harris, ExecVP KIUP R H Houston, CE K D D A A W Eastham, GM В KAFF Christian, O,GM B WAGL B L Philips. Jr. P 1580 WAMY 940 WVLV McDonald, CE CF J Buffington, M WEYY Н O'Neal, E KHOS S Hower, TD K G W A R L Miller. CE WESY M Abraham 970 WDAYL Lee, CE WLIJ R Womble, SM G Thompson, GM WRDI JN Rodio, VP, GM K FuR D K CrI J H Sell, VP, GM W C R V A W Parnau, CE D WfP GhC Nunemaker K MrB Z u/u F C Webster u/u F 1590 WAIK W IgL K C BqY Parrot מ W L F A C M Lowry Jr., CE J WHOO Miller, CE H W Q Q W J Ramsey, ACE E W.R.N.J W VmN A Mary Ann Franck, PD J 1000 Ť Kane, M C 1010 (K D J W) C West, ACE # A L G W P Burchfield, CE H K BrU S S F Collen 1030 K Tow O S Brownell, CE D 1600 K ArT Z C B King, CE M F Ring, CE 1070 W S C P С В 1090 KNCR K Cummings, CE KCRG R Sellers, PD J T A Rusk, Ē W N S T N S Tweel, GM K Ara Y В WEUP E Garrett. CE 1110 WBT T L Plutts, TM Reeder, CE B WPUL Bradley, GM 15 CREDITS VOVO BL Wolf, GM G - N. Zeink McCune, CE A - M. Hardester 1240 W W W D C Jablonski, CE H - M. King B - J. Trochimczyk I - R. Schiller C - H. Hayes WNBZ(C Brescia, CE D - R. Arruda J - K. Andrews Caligiore. A M S E W G L Nichols, CE K - K. Rychalsky E - W. Heinen

F - R. Musco

L - E. Cooper

WJMC RP Kolsky, CE

California tests set for next year of Aerospace Corp. anti-hijack system

The Law Enforcement Assistance Administration believes it has an electronic deterrent to truck hijackers and cargo thieves. The effectiveness of the package will be determined next year when its developer, Aerospace Corp., begins an 8800,000 year-long field study in metropolitan Los Angeles using 40 trucks travelling over a 400-square mile area. The company put together the security system over 3½ years under an \$815,000 contract.

According to LEAA estimates. cargo thefts run at an annual rate of \$1.5 billion, most of it in trucking. An Acrospace survey shows that, on the average, the loss per truck engaged in urban pickup and delivery runs to \$1,950 a year. Thus, for it to be economically attractive, Aerospace concludes its system should not cost more than \$1,000 per truck each year.

"Two separate technologies will be tested in the upcoming program," explains Robert Kennel of Aerospace's Washington office which is managing the program for LEAA. One system employs an amplitude-modulated phase-lock technique that measures changes in position. The other is an "electronic signpost" system that provides absolute position. According to Kennel, one system can be employed to backstop the other. But the user's choice will depend upon the geography of the area where it is used.

Radio stations. The phase-lock technique relies on three commercial a-m radio stations whose normal broadcasting frequencies have been synchronized via high-precision frequency-control units. Thus, signals from the three stations in Los Angeles, KFI, KNX and KPOL, "create a stable hyperbolic electronic navigational grid across the city," says Lester Shubin, development program manager for LEAA's National Institute for Law Enforcement and Criminal Justice in Washington. This is much like the masterslave stations of a Loran system. "As a vehicle moves across the city, its transceiver picks up the a-m signals from the three stations, compares phase differences and relays the comparison back to a base-station computer. The computer, in turn, matches the information to the prestored (hyperbolic) grid for an accurate determination of the truck's location."

However, because the phase-lock system does not measure absolute position, and radio contact may be lost from time to time as a vehicle passes through a tunnel or under high-tension wires, the signpost system is added to update position. It consists of small transmitters mounted, like signposts, on utility poles along the truck routes. Each transmitter, which Kennel says costs \$150-\$200, radiates a unique identification code over a limited area. As a truck passes, its receiver picks up the coded transmission and retransmits it to a base station.

"The (base station) monitor can tell that the truck just passed the intersection of, say, Fifth and Jones streets," Shubin explains. "If the truck were to be hijacked and go offroute, the monitor would soon pick it up."

Sensors. A computer at the base station processes the data and interprets truck location, displaying information on a cathode-ray-tube terminal. It also monitors sensors built into the truck for determining such things as whether the driver's seat is occupied, when a door is opened, or whether someone is in the cargo compartment. There's also a foot-operated alarm that can be covertly operated, and a magnetic movement sensor to signal if the vehicle moves.

Somewhere between 300 and 600 signpost transmitters will be used in the upcoming tests, Kennel says. The exact number has yet to be worked out. In an earlier pilot test completed in Los Angeles in June involving six trucks and 25 square miles, 331 transmitters were used, placed about 1,000 ft. apart. But it was found the area could be covered with transmitters much further apart.

Aerospace's Kennel believes that the a-m phase-lock approach will probably be preferable "because it is cheaper" than the signpost alternative. Phase lock "is accurate within 600 ft. and works 95% of the time," he says, which is good enough. He expects contract awards for the hardware and upcoming tests will be made in two months.

Electronics/October 14, 1976