

## !!! IMPORTANT NEWS !!!

Now that we have your attention.....if you want to order publications do so now, or prepare to wait a few weeks for them. As in years past, no orders will be shipped between the first week of December and the first wee of January. Past experience, including the loss of a substantial number of publications, has taught us not to risk sending materials in the holiday mails. Next on the agenda is the Flash Alert Service. All you folks who want notice of late-breaking CPC Tests should send ten, count them, postcards to Dan Myers, 4848 Royer Dr., Northwood, OH 43619. CAUTION Only the new size cards obtainable from the U.S. Postal Service can be used. fact, were scratching our heads trying to figure out how to handle the 200 or so cards on hand when the new postal size limits went into effect. Each year there are several tests which come up at the last minute and can only be announced through the Flash Alert Service. Now that I've done my "business" thing, here's Ted.....
. A reminder not to forget Ray Arruda's get-together during Thanksgiving--details were published a few weeks back in DX News or you can call Ray....Also and lastly, ye old editor is going to take a few weeks off from DX News to do a couple of other radio-related things...notably, my show "The Big Band Stand" has been accepted by National Public Radio for national distribution (in NY try WNYC-AM at $1 \mathrm{p} . \mathrm{m}$. Saturdays, hi!) and also I have been asked to help write the radio sections of a new book in the "I Hear America Talking" and I'11/be back sometime by about the first of the year!

## CPD TESTS

$11 / 16$ WQRO-1080 Huntingdon, Pa. 0015-0100 ELT with both $1 \mathrm{kw} / 500 \mathrm{w}$, Friday directional north. Will use voice IDs and 1000 cycle tones. v/s is Thomas L. Hanks, WQRO Radio, Box 107, Huntingdon, Pa. 16652. Arr: Arruda for NRC.

> 11/19 KSRA-960 Salmon, Idaho. Will use 100 watts from 0300-0400 ELT. Monday Will include tones, music and voice IDs. Prepaid calls will be accepted at 208/756-2218. Reports to: General Manager, KSRA, Salmon, Idaho 83467. Arr: Mark McMillan for IRCA.

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## CONVENTION REPORT

Here it is, folks--often delayed and finally courtesy of HQ--the convention report--in short this was (and I always say this!) the best NR C convention ever--not only because of the wide range of activities (from tours of stations from KFUO and KWMU to the Busch brewery) but because of the wide range of people who came--from east and west! The whole thing started we'd be in St. Louis!) and continued until our hosts were (and they said so were all of us--in short a fun time was had by all. Who can possibly orget the following scenes:
--The look on the rest of the members faces when the west coast gang (we'd call them a clique, but it could cause trouble) all turned up in Fermilab shirts.
--The lady from Noah's Ark Motor Inn coming up to check after her 12 th complaint about the air conditoning in the hospitality room.
--The annual NRC "official" swim party (with beach ball optional!) - The look on Wayne Murphy's face when a van with Alberta license plates ulled alongside his car at 55 miles per hour about 80 miles east of the Kestevens for the ride, too!)
--The applause of the membership when it was discovered that we set a new auction record of over $\$ 700$ and that was in the heat of the meeting room (they never did fix that air conditioner!)
--The look on Don Erickson's face when on returning to the motel from lunch in St. Charles yours truly almost drove down the pedestrian mall in St. Charles historic area!
--The look of no suprise on anyone's face when Don had to be taken to K-mart for a few new suitcases!
--A certain party telling another certain party that ifthey caused any trouble the party of the first part would come to the party of the second part's home and "punch his lights out!"
--The lovely time we all had at Walt's A-frame house. There was also the fun of Ron Schatz who spent his time listening to Miami to see if he had a home to go home to!
--The banquet.
--Gary Atkins having to hunt all over to find a trailer to bring a file cablinet back to Louisville Labor Day!
--Jim Wallace running around with a tape recorder trying to do a feature --The number of KWK patches we tried to auction off.
--the sign on the chalkboard in the meeting room on Sunday advertisin that a certain NRCer would walk on water in the motel pool at $1 \mathrm{p} . \mathrm{m}$. that day (I went but it was not wirth theeffort!) --Anything else I forgot here.
To get serious for just a moment, a special thanks to the St. Louis gang for their excellent job---especially Lou Buehler and the entire family--especially his son Mike who carried, lugged, cleaned, fixed, listened, etc. to DXers for four long days. Also thanks to Walt for the "black box" of DX.
One final note about St. Louis--as far as we know, the club made som money on the auction this year, so a special cheer--not only did we all have a good time, but for the first time in several conventions, it didn't cost us to have a great timel
See you all in Los Angeles, when John Clements promises us a speech by DJ Sweet Dick Whittington, a visit to Mickey Mouse land and more, so start saving now and see you in LA in 1980 !

## THEY JOINED

G. A. Nitshe, Jr., MD, Burlington Road, Monroeville, NJ 08343 WELCOME!
Frank Wheeler, 415 East Farmer, Andover, Kansas 67002

Recent renewals: Karl Jeter, Richard Eckman, James Hicks, Brian Vernon,
Thomas J. Kelly, George Walton, J.F. Porto da Silveira, Paul Remy, Dennis Thomas J. Kelly, George Walton, J.F. Porto da Silveira, Paul Remy, Dennis Jarrett, Bob Leamy, Jerry Neves, John Feltman, Bill Feidt, John Heinzelman,
Weldon Childers, David Williams, Dave Gleason, Henri Beaudoin, Robert A. Weldon Childers, David Williams, Dave Gleason, Henri Beaudoin, Robert A. Curtis, Morton Meehan, Frank Hostetler, James Critchett, Bruce Portzer, Roger Sabella. Thanks gentlemen for staying in the \#i Medium Wave DX and around!1!!

The new season of excitement may have begun for you as you scan the broadcast band (and, so far in central New Jersey, I'm encouraged), but the activity in the Broadcast Bureau of the FCC hasn't materially picked up yet this fall -- at least not in the a.m. section As an aside to them, I casually mentioned to two of their staff members that things seemed to be a little slow just now and asked if any of the del iberations in Geneva were
causing them to take a long look at applications these days. No, they assured me, there were no external pressures either way, but suggested that the meeting to be convened in March might have an effect on their work later on. That March 1980 meeting will really be a biggy since it will deal with a.m. broadcast frequency matters and will involve all the countries of the western hemisphere (they call it "Region $2^{\prime \prime}$ ). So we'll wait for that.
Meanwhile,
STATION CHANGES NOW IN EFFECT:
Changes in call sign of existing stations:

| 950 - WHPN - Hyde Park, NY is now WWWI | 1300 - WTNJ - Trenton, NJ is now WIMG |
| :--- | :--- | :--- |
| 1000 - WOOP - Danville, KY is now WKLO | 1320 - KKOJ - Clayton, MO is now KADI |
| 1010 - WABZ - Albemarle, NC is now WWWX | 1500 - WDEE - Detroit, Mich is now WCZY |
| 1100 - KVIB - Kihei, HI is ow KHEI | $1530-$ KXXV - Colorado Sprs is now KKCS |
| $1230-$ KKTT - Los Angeles, CA is now KGFJ 1530 - KWWO - Cheyenne, WY is now KUUY |  |
| 1290 - WTOC - Savannah, GA is now WWSA | 1540 - WOGA - Sylvester, GA is now WRSG |

Changes in station ID granted:
1140 - KMMZ - will now use "KMMZ, Greybull-Basin, Hyoming" 1560 - KLNG - will now use "KLNG, Council Bluffs-Omaha"
1600 - WFIS - will now use "Fountain Inn-Simpsonville, SC"

STATIONS AUTHORIZED TO CHANGE FACILITIES (May take awhile to install new equipment):


STATIONS REQUESTING A CHANGE IN CALL SIGN:
 wners have been assigned a local NRCer will tell us which call sign is on the air when?

CONSTRUCTION PERMITS GRANTED FOR NEW STATIONS:
1130 - New - Batesville, Ark -- 250 w . (DA) Daytimer
1340 - New - Bowman, ND -- $1000 / 250 \mathrm{w}$. (non-D)
1600 - New - Saltville, VA -- 5000 w. (non-D) Daytimer
MODIFICATIONS OF LICENSES REQUESTED: (Takes awhile for FCC action or approval):
1110 - KVIB - Kihei, HI wants to identify as "KVIB, Kahului, Hawaii".

# DOMESTIC <br> DX DIGEST 

RAY ARRUDA 47 BURT STREE 47 BURT STREET ACUSHNET, MASS
(617) $998-3958$

02743
Modification of Licenses Requested (also continued):
1190 - KJEM - Bentonville, Ark wants to remain Daytimer, increasing to 500 w. (non-D) 1580 - WPGC - Morningside, MD want to identify as "WPGC, Greenbelt, MD"
STATIONS REQUESTING AUTHORIZATION TO CHANGE FACILITIES:
800 - KQIN - Burien, WA wants to move to 810 kHz and
800 - KQIN - also wants to increase to 5000 w . (non-D) Daytimer only.
1400 - WDOT - Burlington, VT wants to move to 1390 kHz plus unknown power change.* 1440 - WZYX - Cowan, TN wants to remain Daytimer, increasing to 5000 w
*Don't worry, I'll let you know more when it's approved (if it's approved) My copy of the FCC release of $10 / 25 / 79$ is incomplete regarding its power and, of high interest to me! (They carry the Yankees baseball and are tough to hear after sunset 10 miles away!)
APPLICATIONS RECEIVED FOR NEW STATIONS (Usually takes $1-2$ years for approval):
710 - New - Monticello, ME -- wants 2500 w . Daytimer. (Shh, don't tell WOR)
1310 - New - Troy, PA -- wants 500 w. Daytimer.
1410 - New - Henderson, TN -- wants $500 / 500 \mathrm{w} .(\mathrm{DA}-2)$ (they' 11 have more towers
That's all we've got from the FCC since the last time AM Switch appeared! If you count them, I've only listed 25 honest actions/decisions by the FCC. In all fairness, there are many more that I don't show -- changes of ownership, changes of transmitter and studio sites, changes in MEOV's (which represents a slight change in radiated strength but not enough to make a real difference in $\mathrm{dx}^{\prime}$ ing) -- stuff like that. See you next month!

Deadlines are Saturdays. Please use one side of the paper and report in ELT.
SPECIAL


## SUNSET TO MIDNIGHT

The FCC has begun an inquiry on nighttime power limitations and antenna systems for Class IV AM broadcast stations. A Class IV station operates on a "local channel" with a maximum power of 1000 Watts days and 250 Watts nights.
The commission has asked for comments on any aspect of the following proposals:

1) What are the potential advantages and disadvantages of an across-the-board power increase for all Class IV stations?
) Assuming advantages outweigh disadvantages, what are the prospects that stations would actually increase their nighttime power if it were approved?
2) What is the feasibility of using antennas with greater electrical wavelengths such as $1 / 2$ or $5 / 8$ wavelengths to provide improved local service?
3) Since there may be restrictions in some cases about increasing tower heights,
what other techniques (eg., top loading) might achieve similar results?
4) If tower heights were increased and/or nighttime power 1 imits raised, what changes in coverage might be expected?
5) Assuming daytime protection limits would not change, what changes in nighttime
6) Rrotection
changes would be desirable in the present method used to predict nighttime skywave limits?
7) Should increases in nighttime power be permitted only for stations using taller (ie., $1 / 2$ or $5 / 8$ wave) towers?

Comments to the FCC on these or related matters are due November 29, 1979 so that data can be compiled in preparation for the U.S. position at the Region 2 Administrative Radio Conference to be held starting March 10, 1980.

| 540 | WETC | NC | WENDELL-ZEBULON - $10 / 161845$ fair $w / C \& M m$ ad, then s/off w/no SSB, \#7 on 540. (WPT-DC) |
| :---: | :---: | :---: | :---: |
| 950 | WSPA | SC | SPARTANBURG - 10/13 2200 fair w/T40 mx, ID, CBS $N x$. (SRS-IN) |
| 960 | CKWS | ON | KINGSTON - 10/15 2154 fair w/contest promo, rr. (SRS-IN) |
| 970 | WWSW | PA | PITTSBURGH - 10/20 2249 poor w/rr, male DJ, ID. (SRS-IN) |
| 1000 | CFLP | PQ | RIMOUSKI - 10/18 good o/mess © 1831 w/FF talk. (BR-NY) |
| 1050 | WWGP | NC | SANFORD - $10 / 161832$ good atop channel $\mathrm{w} / \mathrm{wx}$, C\&WW mx. (WPT-DC) |
| 1080 | WQRO | PA | HUNTINGDON - 10/17 1820 ID then mx. (BR-NY) |
| 1110 | WSFW | NY | SENECA FALLS - 10/18 1834 fair s/off w/ment. of FM 99 then SSB. (WPT-DC) |
| 1130 | WCXI | MI | DETROIT - 10/17 1825 o/WNEW W/ID, talk. (BR-NY) |
| 1230 | WCMC | NJ | WILDWOOD - 10/22 1932 wx for southern NJ, fair atop GY mess. (WPT-DC) |
| 1260 | WNDE | IN | INDIANAPOLIS - 10/17 1858 good signal w/rr..."The best mx in Indianapolis." (HJH-PA) |
| 1310 | WTTL | KY | MADISONVILLE - 10/20 2217 fair w/jx ID, Disco mx. (SRS-IN) |
| 1330 | WPRZ | IL | EVANSTON - 10/18 1915 very good w/no QRM from local WBRE-1340, "Better Life Radio"...s/off ethis time. (HJH-PA) |
| 1350 | WXCL | IL | PEORIA - $10 / 152050$ poor $w / C \& W \mathrm{mx}$, ID o/MSLR/WIOU. (SRS-IN) |
|  | CKAR | ON | OSHAWA - $10 / 18$ good o/WZIX/WSLR e 1815 w/ID then request \# 723-4618, then mx. (BR-NY) EX-CKLB, Bill. (RA) |
| 1360 | KHAK | IA | CEDAR RAPIDS - 10/14 $1929 \frac{1}{\frac{1}{2}}$ good $\mathrm{w} / \mathrm{s} /$ off. (RK-IL) |
|  | KPFA | AR | HELENA - 10/15 2040 tentative here, very poor $w /$ Soul $m x$, YL w/"PFA" IDs z (SRS-IN) <br> (SRS-IN) |
| 1370 | WTTS | IN | BLOOMINGTON - 10/15 2030 fair w/full ID \& Ai Nx o/WSPD. |
| 1410 | WELM | NY | ELMIRA - 10/15 1847 fair w/VID, Pop mx. (BR-NY) |
|  | WHLN | KY | HARLAN - 10/14 good u/WING, then loud 1853-1859 s/off in WING null, tri-state wx, short s/off w/SSB, new. (PRM |

WLIS
19 Updike Avenue
RADIO
Wickford, Rhode Island 02857
1450 WTSA VT
1460 WBUC WVUNID --
1530

BRIDGEPORT - $10 / 16$ fair e $1800 \mathrm{w} / \mathrm{ID}$ followed by nx . (BR-NY)1550
$\begin{array}{ll}\text { WTGF } & \text { SC } \\ \text { WKYE } & \text { TN }\end{array}$
WORI TN
1570 WOBS IN

ST. ALBANS - $10 / 18$ fair 1815 s /off. (BR-NY) LANSDALE - $10 / 16 \quad 1830 \mathrm{~s} / \mathrm{off}$ weak in mess. (BR-NY) GREEN BAY - 10/20 2050 fair w/Oldies, TC, ID by OM. (SRS-IN) LEXINGTON - 10/22 1831 end of $n x$ program, ID w/ment. of NC, fair while still on day power just before switch to night pattern. (WPT-DC
BRATTLEBORO - $10 / 161930$ in just long enuff for $w x$ \& perfect ID. (GEW-PA)
BUCKHANNON - $10 / 14$ first noted $1730 \mathrm{u} / \mathrm{WBNS}$ on the way home, ${ }^{j x}$ into $n x$, louder \& equal to WBNS near home, FARRELL - $10 / 1718340 / W S A N$ w/ID/nx/wx, T40 ( new. (PRM-OH) TERRE HAUTE - 10/17 1912 good $w / C \& W / m x$, "Coun (BR-NY) WTHI:" XENIA - 10/14 1900 good @ s/off. (RK-IL) ANNVILLE-CLEONA - 10/14 1822-1829 good w/WLAC QRM w/Rock, spots for Lebanon, s /off $1829 \mathrm{w} /$ address ments. new. ( OH )
101 - $10 / 211829$ ment. of Tri-Valley Area wx,
PICKENS - $10 / 191900$ fair $\mathrm{w} / \mathrm{s}$ /off. (RK-IL
BRISTOL - $10 / 181900$ fair $\mathrm{w} / \mathrm{s}$ /off. (RK-IL
AK RIDGE - $10 / 15$ very good near Logan on US $33 \mathrm{w} / \mathrm{TRN}$ Nx
then into Rock 1901-1907. (PRM-OH)
NEW ALBANY - 10/14 tentative, faire s/off 1900 "tomorrow
morning § 6 when....a fine day...WOBS(?) Radio" then SSB
Are these words used in WOBS s/off? (PRM-OH)
PASCAGOULA - $10 / 15$ 1903-1930 s/off $\mathrm{w} / \mathrm{FM}$ ments, no SSB. (BR-NY)
CHARLES CITY - $10 / 14$ fair $1928 \mathrm{w} / \mathrm{talk}$ by F DJ, wx,
VAN BUREN - $10 / 14$ fair $1944 \mathrm{w} / \mathrm{s} /$ off, no SSB, of ten heard
e LSS. (PRM-OH)

- 10/14 after KFDF S/off, KNIM started their
1945 w/250w mentioned \& South Hwy (PR, Not
Broadcasting Corp. 2nd time heard. (PRM-OH)
TUSCUMBIA - $10 / 14$ good w/CBS Dateline America $N x$ pgm
ID, PSA © 1946 INAKR, new. (PRM-OH)
CLAYTON - 10/21 very good 1845 s /off by $F$ anner $w / m e n t$,
of 2.8 mi , west of Clayton, 500 W PSA, 5 KW to LSS. (PRM)
HUNTSVILLE - $10 / 151900$ blasting in w/area wx, "Disco 16
WUNTSUILLE - slogans. (PRM-OH)
DANSVILLE - $10 / 151844$ good © s/off, new. (BR-NY)
JERSEY SHORE - $10 / 151845$ noted $\mathrm{s} /$ off $\mathrm{w} / \mathrm{no} / \mathrm{SSB}$, also
new. $10 / 15 \mathrm{~s} /$ off noted also. (GEW-PA)
MIDNIGHT AT THE OASIS
550 WGR NY BUFFALO - $10 / 140324$ perfect ID \& $n x$ of Castro visit. (GEW-PA
WGR NY BUFFALO - $10 / 140324$ perfect ID $\& n x$ of Castro visit.
610 WIP PA PHILADELPHIA - $10 / 140338$, contest promo, ID, PSA for
620 WTMJ WI MILWAUKEE - $10 / 14025$ rare here w/perfect ID on tape, (GEW)
690 CFRG SA GRAVELBOURG - $10 / 170754$ fair $\mathrm{w} / \mathrm{mx}$, s/on 0756. (RK-IL
730 CKNR ON
790 WNWS FL
Dept. (GEW-PA)
SOUTH PITTSBURG - $10 / 190659 \frac{1}{2}$ poor s/on, no SSB. (RK-IL)
920 KARN TN SOMH PIRCBURG
KARN AR LITTLE ROCK - $10 / 140100$ good $w /$ ELL mx, ID, N
WLIV TN LIVINGSTON - $10 / 150718$ poor w/spots. (RK-IL)
WOKY WI
930 WKY OK OKSTAHOMA CITY - $10 / 13$ O225 in WGNT null $\mathrm{w} / \mathrm{ID} / \mathrm{T} 40 \mathrm{mx}$,
local spots. (LVH-TN)
HUNTINGTON $-10 / 130226 \mathrm{w} /$ talk show, local promos $\mathrm{w} / \mathrm{WKY}$,
best ever heard. $10 / 150635$ poor $w / l o c a l ~ n x$, spots,
WKCT KY
60
ix
BOWLING GREEN - $10 / 140018$ fair/good $w / I D, w x$, rr.
Ae Nx 0030. (SRS-IN)
JACKSON - 10/14 0018 fair w/full ID \& rr o/WKCT. (SRS-IN)
ROANOKE - $10 / 210147$ fair, $\mathrm{rr} / \mathrm{wx} / \mathrm{mFIR}^{n}$ ID. (SRS-IN)
FARGO - 10/21 0509 fair w/Larry King Show. (SRS-IN)
FREDERICTON - 10/22 0458 fair/poor \& fadey w/NA, s/on,
$\mathrm{nx} / \mathrm{sports/wx}$, many ments. of St. John \& Fredericton. (RK-IL)

1130 KWKH LA SHREVEPORT - 10/14 0518 good w/C\&W mx, ID. (SRS-IN)
1150 WJBO LA BATON ROUGE - $10 / 140515$ \%/u WGOW w/Larry King. (SRS-IN)
1170 KVOO OK TULSA - 10/14 0254 good w/C\&W mx, IDs by OM DJ, no
1190 KRDS AZ TOLLESON - $10 / 70600 \mathrm{w} / \mathrm{VID}, j \mathrm{jx}$, UPI Nx, fair u/KEX OC.
1220 KJAN IA Only possible Sun. during KEX SP. (BH-WA)
1240 KESE CA MONTEREY - 10/10 0100 YL ID, Ai Nx, 0105 prome? (RK-IL)
1250 KPAC TX PORT ARTHUR" - 10 BRI 130256 , atop UNID SS \& others. (BH-WA)
1250 KPAC TX PORT ARTHUR - $10 / 130256$ w/Larry King Show, local ads,
WEMP WI MIIWAUKEE - Nx on the hr. (LVH-TN) WI MILWAUKEE - 10/16 0759 atop WREN briefly w/fair signal
W/nx story WEMP ments drowned out seconds later by
KNEU/KIKC s/ons. KAYC off till 0802, State \#40t (BH-WA)
KNEU UT ROOSEVELT - 10/16 0759:30 s/on u/WEMP, legal ID coming just ahead of KIKC's rooster crows, UPI Nx 0800. My wife logged KNEU/KIKC next day w/good sigs. Everyone in the Pacific Northwest should be logging these two during daily KYAC SP's; they're east enuff, w/KNEU stil
in well after KYAC returned to the air $\& 08021$ (BH-WA)
KIKC MT FORSYTH -10716 0759:45 s/on w/3 rooster crows, $j x$,
then straight into Network Nx (APR). Good atop WREN/KNEU/
EMP, KYAC off till 0802. (BH-WA)
1260 WCSA MS RIPLEY - 10/18 0701 $\frac{1}{2}$ fair s/on, no SSB. (RK-IL) SYRACUSE - 10/14 0450 good w/ID, PSA, rr, APR Nx @ 0453. (SRS) PHILIPSBURG - $10 / 150600$ poor s/on w/IDs, NBC Nx. (SRS-IN)
MONTREAL - 10/21 0450 fair w/talk by YL/OM o/others. (SRS) MONTREAL - $10 / 210450$ fair w/talk by YL/OM o/othe
PIEDMONT - $10 / 220700$ good $\mathrm{s} / \mathrm{on}$ w/SSB. (RK-IL) LANCASTER - $10 / 220753$ fair $w / s p o t$. (RK-IL) INNITEG HEICHTS PETERSBURG HOUSTON - $10 / 140408$ good w/jx ID autre $0600 \mathrm{~s} / \mathrm{on}$. (RK) HEW ORLEANS NEW ORLEANS - 10 140352 fair W/ELL, PSA, CDT check. (SRS) DES MOINES - $10 / 200550 \mathrm{wx} / \mathrm{ID} / \mathrm{TC}$, program notes, then Mor mx. (LVH-TN)
MANCHESTER $-10 / 200600 \mathrm{~s} /$ on \& slow fade out for station
1280
1290
1320
1350 \#542 \& 354 on tape. (LVH-TN)
TOLEDO - $10 / 140237$ wx, then ID. (GEW-PA)
1370 WFDR GA
1420 WHK OH CLEVELAND - 10/14 0203 regular visitor here nights w/C\&W
1440 WHHY AL MONTGOMERY - $10 / 140248$ fair w/T40, ID \& World Series Scores.
1460 KRNY NE KEARNEY - $10 / 150716$ poor $w / s o f t$ rr, spot \& public affairs program. (SRS-IN)
HARRISBURG - $10 / 140200 \mathrm{w} /$ Rod Stewart mx , less than 100
WCMB PA $\begin{aligned} & \text { HARRISBURG }-10 / 140200 \\ & \text { mi. away but rarely heard. (GEW-PA) }\end{aligned}$
1480 WSAR NA mi. away but rarely heard. (GEW-PA)
FALL RIVER - $10 / 140140$ poor W/ID \&

WSAR NA FALL RIVER - $10 / 140140$ poor W/ID \& Nx. (GEW-PA)
KBEA KS MISSION - $10 / 14$ Mutual Nx, Nightowl program promo, ID,
WABB AL MOBILE - $10 / 140238$ poor W/AM-FM ID, spots. (SRS-IN)
1490 KBIX OK MUSKOGEE - $10 / 140150-0203 \mathrm{w} / \mathrm{Milli}$ ion Dollar Weekend, T40 mx, then nice ID $w /$ full $\mathrm{s} /$ off $\mathrm{w} / \mathrm{NA}$, best GY catch
1500 WKZN IL Super strong w/Mutual Net UNID stn. nulled out, taped. (LVH-TN)
1500 WKZN IL ZION - $10 / 16$ on20 poor w/ID, supposed to be oniy 3.46 w e
1510 WITS MA BOSTON - 10/14 0143 xint w/ments. of Boston Bruins. (GEW) IL)
$\begin{array}{llll}1520 & \text { WIDD TN ELIZABETHTON - } 10 / 18 \text { 0731, w/SSB, jx, s/on. (RK-IL) } \\ 1550 \text { UNID -- }\end{array}$ ID, ID too weak to decipher, no sign of WOKJ, possibly KKHI as programming fits, but can't be sure. (RA-MA)
WYOU FL TAMPA - $10 / 140 / \mathrm{KOKA} 0114-0127$ on ET/TT/OC/ID w/10KW. (LVH-TN) 1560 WPAD KY PADUCAH - $10 / 14$ EX-WDXR W/C\&W mx, ID, then gone 0138. (LVH)
I'm clearing out so I can squeeze the credits into the bottom of this page. See you next week: $73 . .$.

## THE BIG 12

| BH-NA | Bill Hardy, Aberdeen, WA | HJH-PA | Harry Hayes, Nilkes-Barre, PA |
| :--- | :--- | :--- | :--- |
| RK-IL | Robert Kramer, Chicago, IL | GL-MN | Gary Lovegren, St. Paul, MN |
| PRM-OH | Paul Nount, Nelsonville, OH | BR-NY | Bill Regan, Syracuse, NY |
| SRS-IN | Steven Shaffer, Hammond, IN | ERS-NJ | Elliot R, Straus, W. Orange, NJ |
| NPT-DC | Bill Townshend, Washington, DCLVH-TN | Larry Van Horn, Niliington, TN |  |
| GEI-PA | George Walton, Easton, PA | RA-ivA | Ye Ed, Cush Net, NA |

585 SPAIN Madrid poor w/Pop $m x$ in WEEI slop 2312 10/19. (Connelly) $\frac{\text { MOROCCO }}{}$ het; male AA chanting $010410 / 22$. (Connelly), reducing 610 to 630 CUBA GMHQ Santa Clara $053010 / 14 \mathrm{good} \mathrm{w} / \mathrm{LV}$ de Cuba ID, TC, and Dx pgm. (Shaffer)
1979 , KFAR Fairbanks format now is 11 music from the years 1939 1979 , stn is celebrating its 40th birthday. (Vernon)
UNID faint carrier from NE $0457 \mathrm{SatM} 10 / 20$, the lowest European freq found trying to deliver something this far west on the chird consecutive alght of in reception ln denver. May not have the usual iberian stations were not noted in this opening which seemed to favor northern Europe. No trace of audio here. (Martin) ALASKA KBRW Barrow 10/13 0612-0614 noted carrying NPR "All Things Considered" pgm, 0614+ mx, semi-regular here. (Vernon) SPAIN Seville RNE 0000-0005 10/26 YL/GM in SS across hour ID'ed as "Radio Nacional de Espana", good. (Straus)
UNID a NE carrier here for the first time ever 0327 SatM 10/20. Believe that's too early for Britain so don't know what to guess (Martin) BBC is AN now so probably them or Germany-CH
ALASKA KBYR Anchorage is using the disco format these days, still on CBS net. (Vernon)
FRANCE Rennes France Culture 10/12 0548 YL and $\mathrm{CM}_{\mathrm{M}}$ in Latin type PORTUGAL Norte good $W /$ festive rhythmic PP mx and female vocal PORTUGAL Norte good w/
USSR unknown FS outlet $10 / 201228$ band $m x, 1229$ OM in RR; then FS IS, 1230 R. Moscow WS nx in briefly in EE, $1231 \frac{1}{2}$ "Music at Your Request" also in EE, YL anncr to 1258. OM anncr mentioning closure of some SW freqs to Australia and SE Asia, $1259 \frac{1}{2}$ FS IS. 1300 OM in RR, uptempo Midnight in Moscow mx, 1301 YL and GM sounded RR but not $100 \%$ sure. Sig xint, rarely listen at these times, KUAI and KOTZ always off at these hours. (Vernon) UNID when XEX was nulled, a NE carrier hetting it 0332 Sat M SPAIN Barcelona fair w/man in SS $231010 / 1$
SPAIN Barcelona fair W/man in SS 2310 10/19. (Connelly)
738 UNID carrier from Europe at 0334 SatM 10/20. At 0447 found other station interfering with it. By 0509 Tahiti's usual het against 740 arriving well. That was 7:09 PM in Tahiti. (Martin)
747 UNID carrier by 0442 . Nothing there an hour before. (Martin)
756 GERMANY Braunschwelg or Ravensburg or both, found close to audio at 0435. Nothing there an hour before. Taping 0529-0536. First, only male voice, by a couple of minutes it was sounding German, and in another minute it was distinctly German, and the tape reveals a mention of Deutschlandfunk around 0535. Distinctive IS noted twice 30 seconds apart near the end of the tape- 7 or 8 notes of mx spread over about ten seconds each time, not pips. Nothing ever found at this spot before except Portugal 755. Taped mans were in a fade at the time, and no sign of anything else taking the air. Taping was done with crystal at 1 kHz setting and on the lower sideband to minimize WJR. (Martin) PORTUGAL Lisboa potent $\mathrm{w} / \mathrm{cl} \mathrm{mx}$ o/SAH at 2306 on $10 \%$ PORTUGAL Lisboa potent w/
2309 on $10 / 19$. (Connelly)
$765 \frac{E L}{10} \frac{\text { SALVADOR }}{20}$ YSKLD here from the SE, and nothing from the NE, SatM $10 / 20$ right after hearing Germany so well on the adjoining freq. Listened in vain for some trace of Switzerland during and after hearing Germany for that is almost my most wanted European country. Faint carrier, no audio, appeared from presumed Dakar carrier at 0419. (Martin)
ENGLAND BBC pips taped at $0600 \mathrm{ThM} 10 / 18$, the first night of TA
next two nights. Same night NE carriers found $0553-06241215$,
1206, 1197. (Martin) Carrier first noted tt 0521 10/21. Yr reading
nx: but wasvery murky in CJVI 900 splash 0601, quickly fadod. CM
talk after organ mx 0616. Too early for New Zealand, and DU cx
not that good. Apparent TA carriers noted from 0440 on 531,648 ,
756,774 , and 873 . (Hall-Patch) R. Wales $10 / 120546$ OM in EE w/
756,774 , and 873. (Hall-2
904.8 EL SALVADOR San Salvador, have been trying for months to determine
Whe SALVADOR San Salvador, have been trying for months to detern was the YS or the HG and I finally got lucky.
Noted 0459 10/21 at poor lovel w/marima aarking apparent ID.
Severe QRN masked calls and sion
atrange, but this was a fair strongth split about 4 years aso
and then they disappeared for years. Now they are apparently
back but they sure don't have the signal they used to-CH
ENGL,AND BBC strongly hetting 910 bits of mx show getting thru;
oncland BBC strongly hetting 910 bits of mx show getting
10/19. (Connelly)
BRAZIL ZYJ453 Rio de Janeiro 0256 10/14 fair PP OM's w/futbol
BRAZIL ZYJ453 Rio de Janeiro
UNID $10 / 120426$ a bit of a puzzle, GG male choir type mx, signal
quite weak, six pips at 0430 then YL , audio unreadable by that
time. (Vernon)
INTERNATIONAL WATERS R. Caroline $10 / 200521+$ religion, EE Pgm from
cianca, Georgia (where is that? Hi) (Simple a suburb of Decatur,
then another US hell fire preacher followed. (Vernon)
COLOMBIA HJHF Manizales R. Nacional 10/6 0447 YL in SS, many men-
COLOMBLA HJHF Manizales R. Nacional $10 / 60447 \mathrm{YL}$ in SS, many men
for a record store, seemed to be an ID at 0458 and "Nacional"
and "Colombia" clearly heard, signal lost by 0459. Tape and S
report sent to stn, only tentative reception. (Vernon)
$\frac{\text { WEST }}{(V E R}$ GERMANY Wolfsheim Sudwestfunk $10 / 120450 \mathrm{w} /$ instrumental mx.
(vernon)
035 PORTUGAL/UNID Porto Alto loud w/PP talk (talk about going to the
ifttle boys room? CH) soft mx atop second stn, maybe 4 VEH or
Italy, 2303 10/18. (Connelly)
CHINA Shanghai--at lasti NW looping 1245-1325 ThM 10/18. A index
5 , the K at 1 , and local SR at 1312 . From 1245-1300, Pgm of
brief mx portions w/lady anncr as many as 4 times. Each time
she talked less than a minute. Oriental lang but never clear
and some of whether CC or JJ. Mx marked by flutes and pipes
the stn in a fade of course, and local RF becoming conspicuous.
Excerpts audible from 1300-1315, had male and female voices al-
ternating, no $m x$, in the common style of Communist news reports
throughout the world. By 1320 and 1325 only the BFO could locate
the carrier. By 1330 even the BFO was non-productive. A better
signal than the NZ'er I have occasionally found here. Have made
Shanghai this far east. This

EAST GERMANY Dresden DDR1 $10 / 120448$ Neil Diamond
1044 MOROCCO Sebaa-Aioun good w/light rock O/SAH 2302 10/18. (Connellly)
1424.6 ALGERIA noted nightly after receiving boring, mundane call

UNLD strong NE carrier close to audio 0359 SatM 10/20. First time I ever thought I might have a signal from East Germany. (Martin)
MEXICO XEG Monterrey 0928 10/14 xlnt, many ads and LA mx. Way O/CHUM. (Shaffer)
ENGLAND Droitwich etc. BBC $10 / 130553$ Mor R.Z. ( $19-\mathrm{CH}$ ) mx w/ male anncr, 0600 Radio One SID, into $n x$, xlnt sig/ 23011089 which UNID NE carrier $0404 \mathrm{SavM} 10 / 20$, giving me some Romanian fantasies! (Martin) BBC is AN now so reluctantly I let the air out of your balloon.....ch
PORTUGAL Norte good w/cl mx 2258 10/18. (Connelly) UNID carrier this spot, not 1061, $0407 \mathrm{SatM} 10 / 20$. Would love to be served a mall Danish someday. (I have one available about $5^{1} 1^{n}$. That OK? CH) Simply must pay more attention to the 10001100 kHz area. (Martin)
HAWAII Kihei $10 / 13$ noted $\mathrm{w} / \mathrm{s} / \mathrm{off}$ at 0903 mentioned $\mathrm{s} / \mathrm{on}$ at 5 AM Hff time, prayer followed at 0904 in EE and native lang, Off. Forg
(Vernon) PHILIPPINES DWVA Poro Pt. VOA: 10/17 1106 OM in EE talking about ALASKA KABN Big Lake/Long Island $10 / 211139$ YL w/appeal for sponsors, also KABN T-shirts for $\$ 7$, T-shirt and listing as a KABN supporter for $\$ 10$, address "Cabin Drawer D", Bis Lake, Alaska 99687. Stn seems 24 hrs NSP, don't recall ever hearing a sponsor on the air. (Vernon) One large ordered.....CH SCOTLAND R. Clyde, Glasgow $101 / 190506 \mathrm{CM}$ signing on w/a Break-
fast show on "2-6-1", currently on +1 hr GMT. (Vernon) IRETAND Cork $10 / 190617 \mathrm{aM} \mathrm{w} / \mathrm{mx}$ pgm, lost 0622 but noted at 0633 w/PSA for starving kids in Bangladesh, one address given was Church of Ireland relief. CM anncr w/obvious Irish accent. (Vernon)
FRANCE Bordeaux France Culture 10/13 0551 male and YL in Oriental Iingo, Viet listed. (Vernon) Loud on car rx w/cl mx, plastering 2234 10/19. (Connelly)
GREPNLAND Thule AFRTS net $10 / 120618$, Frobisher Bay topping UNID $011010 / 20$ strong TA carrier w/bits of instrumental mx on peaks. (Straus)
UNIDS strong graveyard type of carriers 2316 10/19. (Connelly) WEST GERMANY Neumunster rising over fierce 1270 het w/bits of GG tall 2316 10/19. (Connelly)
CZECHOSLOVAKIA stn heard here w/mx weak 2315 10/19. (Connelly) FRANCE Nancy/Nice France-Inter 10/12 0444 w/instrumental mx, 0445 FRANCE Nancy/Nice France-inter in (e and YL in FF, xlnt sig, no QRM all. (Vernon) $\mathrm{ST}_{3}$ PIERRE ET MIOUELON R. France here w/FF folk mx o/heavy 137 $\frac{S_{2}}{\text { het }} \frac{\text { PIERRE }}{2256} 10$ ET 8 MIOUELON R. France here W/FF folk mx o/heavy FRANCE Lille France Culture $10 / 120443$ male and YL in unrecorded解, local like sig, (Vernon)
ALBANIA Lushnje $235010 / 19 \mathrm{good}$ w/SS YL talk w/presumed world mx. (Straus) Loud w/man in FF 2255 10/18. (Connelly) GUINEA Conakry $011510 / 20 \mathrm{good} \mathrm{w} / \mathrm{drums}$ and GM in vernacular. WEST GERMANY Heusweiler Europawelle-Saar $10 / 120442$ instrumental $\frac{\mathrm{mx}}{\mathrm{m}}$, much splash from Thule 1425 pest. (Vernon) ALGERIA A1gers; 2230 to 2330 10/22. Mx mostly American ballads; FF male and female anncrs; 46-50 dB/noise on peaks. When I first discovered this signal here July and August it held great promise for off-irequency Thule (except that it had foreign rounding anncrs and the timing didnt sear ribean area rather than Europe or Africa because of its programs and consistency until I checked the frequency several times after midnight GMT and drew a blạnk. Later I considered it possible that Mali was wandering from 1431 kHz but this didn't ring true. Then finally I proved to myself it wasn't the new prospect, Mauritania up from 1422 kHz ,
No, it wasn't first class DX but neither was it elementary Dr . No, it wasn't first class $D X$ but neither was it ele
Watson: it's the Kabyl network $/ / 6160 \mathrm{kHz}$. (Bailey)
UNID per tips from Farmerie and Foxworth, a stn was noted here pected Algeria per anthem heard at 0000 . This stn apparently pected Algeria per anthem heard at oove. This stn apparentiy (Con)
from purportad DX'er named Foxworth in NYC Thursday 10/24 Bob had heard the Algerian NA on the $a t n$ and noted that it had wandered from around 1424 to 1425 . Since $10 / 24$ it has ranges from UD hard rock the mx to ceml Not ID ${ }^{\prime}$ drore. (CH) GREENLAND $8 / 18$ (you mean $10 / 18$ if CH ) after phone tip from Mark GREENLAND $8 / 18$ (you mean $10 / 18 \uparrow 7 \mathrm{CH}$ ) after phone tip from Mark Connelly at 2230 GMT re country-western mx on 1425 , unid heard ing like EE W/American sounding mx. Bearing near expected 1.2 degrees but not accurately measured. Nothing after 2255 except unid Latin on 1424 kHz . Both stns were definitely 1425 and 1424 kHz respectively and not the aene. Newfoundland stns noted booming in by local DX or John sapinos. Hi and 10 band TA's in well especially 1395 Albania, 1521 Czech?, so I feel this was Thule which I've chased for years. Who else due north on 1425 (Farmerie) I don't know, but I wonder where Algeria fits into the picture? 1?? There's an unid LA wandering around between
UNID Greenland ${ }^{18}$ CEW mx poor, fading rapidly then gone 2247 10/ 18. This could also be the 1424 job reported above-drifting is
a distinct possibility here. (Connelly) See above......CH
T:30 Alaska time, change NRC log sked to 1130-0300 ELT. (Vermin)
1458 ENGLAND $10 / 120523-0530^{\circ} \mathrm{MoR}, \mathrm{R}_{\mathrm{o}} z_{0}$. Pge (TYCH) 05302 stns began mixing, both EE. An ID at 0534 sounded like R. London so probably Manchester/London mixing. (Vernon)
1458 ENGLAND R. London 10/18 and 10/19 noted w/Radio Two so 0529 1458 then YI w/R. London s/on, GM w/mx 0530. (Vernon)
1458 ENGLAND R. Birmingham $10 / 190551$ GM anncr w/EZ mx type show, 1458 UNID $10 / 12$ o419 male singing in AM, forgot to chock possible / UNID $10 / 12$ CuAt male singing in AM, forgot to check possible little wevey but clear. (Vernon)
1467 MONACO Monte Carlo 10/12 0441 music bou IS. (Vernon) 2330-2345 10719 GM PP talk, xint 2345 into SS Pge, SS OM talk, SS vocals. (Straus) Monte Garlo fair in bad slop w/possible EE talk a half hour earlier on the car rx mearer the coastline. (Con)
1476 AUSTRIA Wien-Bisamberg $10 / 120420$ male in GG o/mx. (Vernon) $1485 \quad \frac{A}{\text { ICELAND }}$ AFRTS Keflavik $10 / 13$ 0540-0547 MoR/rr type mx, PSA for American Cancer Society at 0547. Hofn also on this frequency with 5 to 10 watts per 667 th ACWS. (Vernon)

SAUDI ARABLA dominant and loud w/AA chanting o/feeble 1520 het Belmont 2208 10/17. Many other TA hets ware noted at pond in Man in AA good, atop second audio (Czech?); WKBW nulled 2238 Man in AA good, at
$10 / 18$. (Conneliy)
1548 ENGLAND R. Bristol $10 / 190535 \mathrm{rr} \mathbf{m x}, 0546 \mathrm{Bristol}$ Rovers Lotery esults, rr followed then lost. (Vernon)
WEST GEPMANY Langenbert WDR $10 / 120422$ instrumental $m x$, $x$ int $\frac{18}{s 1 g}$, thus or France 1377 are good Indicators of TA DX here. (Vernon)
Bill Bailey-Holden, Mass. Mark Connelly-Billerica, Mass. Tom Farmerie-Graiton, Mas. Nick Hall-Patch-Victoria, BC Gene Martin-Denver, Colo. Elliot Straus-W. Orange, N.J. Elliot Straus-W. Orange, N.J. Bill Townshend-Washington, DC Brian Vernon-Elea, Yukon Torr.

2 R390A's, 2 phased pairs of $1200^{\circ}$ Beve R390A, MWI, 237 meter phased wires R390A, $4^{\circ}$ FET AA loop tranemogrified Hito, FET AA loop HQ180, box loop R390A, AA loop, HP 524B counter R390A, A loop, HP 524B
modified FRG7, box loop modi
DX 150/160/300. 5 Beverages

## WINS SILENT PERIOD

With a little luck some information from Bill Bergadano regarding the WINS silent period may still be of use. His letter dated Oct. 21 did not reach us until Nov. 4. Anyrate, you East Coast types watch out for WINS off from Midnight to 5 or 5:30 a.m. on a Sunday Morning in November. we thank Rosemarie DeVincenzo for her courtesy and help in obtaining this information
Now look out for some good DX on 1010 khz .

## DX'ING WITH THE 'DX FLIERS'

## Gerry Thomas

Charlie Barfield

The idea was too intriguing to be put off any longer. For the past two vears we had wondered about it, about the DX to be had by sending hundreds of feet of wire aloft with a kite. After all, hadn't we read somewhere that the antenna for Marconi's first wireless was supported by a kite? And that kites routinely "erected" military radio antennas dur ing WWI? Then why hadn't we heard of any BCB DX'ers using kites to improve, especially daylight, DX? We felt certain that the kite, antenna must have been used by someone at sore period of BCB DX history, but since no IRCA or NRC reprints existed on the subject, we decided to give it a try ourselves.

As an initial effort, we thought it best to start modestly. Our goal would be to get 650 feet of 26 -gauge copper wire airborne using simple-to-construct, or inexpensive-to-buy kite designs. One of the questions to be answered concerned just how much improvement DX antenna of 145 feet of 26 -gauge kite-flying wire would orovide over our usual daylight longer, it could be expected to have a higher resistance than the 12-gauge antenna. We were hopeful, though, that this disadvantage would be offset by the fact that the kite antenna would be situated at a much higher altitude and, therefore, would be well clear of surrounding obstacles. To get an idea of how good or how bad the kite antenna was, our daylight DX logs, which have been compiled over the past two years using several types of antennas, would serve as a checklist as we scanned the dial. In addition, a Realistic "TRF" located well clear of the kite antenna and operating only on its built-in ferrite loop would provide a secondary comparison.
Two kite designs with approximately 30 -inch wingspans were tested---a home-made (from $1 / 4$-inch dowels and a plastic garbage bag) traditional, bowed, diamond shape which we dubbed the, "DX Flier II " The radio used was an extensively modified Realistic "TRF" outfitted with an external antenna tuner. The site of the test was an abandoned helicopter training field located just north of pensacola prover. Winds that early October day were a fairly steady $8-12 \mathrm{mph}$ from the SSW and the sky was cloudless.

We first tried the "DX Flier I" tethered by a polyester blend of string ( $\$ 1.27 / 500$ feet; k-Mart) with the copper wire affixed to the string near the kite body. The combined weight of the string, wire, and over-stated tail (about 15 feet in length) coupled with the relatively light winds made the "DX Flier I" a little sluagish. Removing the string and part of the tail section and allowing the wire to serve as the tether resulted in a much livelier kite. So much livelier, in fact, that upon reaching an altitude of 50 feet the "DX Flier I" returned abruptly to earth, thereby ending its day of testing. (We, nevertheless, think that this design would have worked well had we been able to make adjustments before demol ishing it.)


Charlie Barfield optimistically beginning a state-of-the-art launch of the "DX Flier I"

We next turned to the "delta" kite. Although described as a "tail-less" design, we found that a six to eight-foot tail helped the stability of the "DX Flier II" significantly. Using the copper wire as the tether, the "DX Flier II" rose effortlessly and
within 10 minutes was at the end of its $650-$ foot line. The actual height that the kite body itself reached was estimated to be approximately $300-350$ feet.


How did the kite antenna do? As you might expect, connecting the 650 -foot antenna to the "TRF" resulted in a very large gain in signal strength over the built-in ferrite loop. We used an antenna tuner, remember, but even the very inefficient stock antenna coupling anyway, the front end of the "TRF" showed no signs of overloading with the kite antenna. ) As far as daylight DX is concerned, we were very favorably impressed. While time constraints prevented us from ID'ing every station, a total of 26 new daylight stations we noted during a single dial scan. With Pensacola having just about the worst soil conductivity in the country (and, thereby, a generally feeble potential for groundwave pro pagation), a 26 -station gain to a two-years-running $\log$ is much appreciated. The farthest domestic catch, at a distance of about 700 miles, was WOA1-1200, San Antonio, Texas which had never been heard here before in daylight even during the best of conditions. Also noted were WSM-650 and KAAY-1090 (both logged only once last winter) and WSB-750, a mid-winter regular but rare at other times. The remaining 20 -odd stations were mostly regional stations located in the Southeast, although a few new daylight Cubans were logged there were really no comparisons to be made.

While we weren't able to answer all of the questions we had concerning the parameters of kite antennas, we were able to determine that our 650 feet of 26 -gauge wire (costing a total of $\$ 6.60$ ) could be sent aloft with a simple kite and that its signal gain would exceed what we were currently using. And with this encouraging finding, a list of successive projects immediately came to mind---multiple wavelength kite antennas (perhaps held aloft by a train of kites); all-night kite flights; steerable kite antennas; and so on. One of the more interesting questions involves whether a Beverage-length kite antenna would exhibit useable lateral nulls (or would the vertical aspect of the antenna totally destroy thite hir gain and
ifion though, there are a couple of rather sig nificant disadvantages of kite antennas. The first is that you are at the mercy of the Wind and its direction. More a kite near power lines, or during stormy weather. And even during cloudless days, static charges can build up and give a severe shock. Therefore, you should always use a ground-keep the antenna grounded until it is connected to the radio (which is also grounded), then ground it again before disconnecting it from the radio. An on-line "fuse wire" probably wouldn't be a bad idea either.
We, quite frankly, initially approached this escapade quite tongue-in-cheek but have decided to continue tinkering around with these kite antennas, so if you have any sug gestions (or questions), don't hesitate to contact us.

73 's
Gerry Thomas
2355 W. Michigan Ave. Apt. A-11 Pensacola, FL 32506

Charlie Barfield
917 Fremont Ave. Pensacola, FL 32505

## DX-PEDITION TO THE AZORES

Peter McGonagle

Report by Mark Connelly
A friend of mine who works at Teradyne, Peter McGonagle, recently went to Lejes Field on a two week tour of duty with the U.S. Naval Reserves. He took a Realistic TRF, a cassette deck and a copy of the World Radio-TV
Handbook. During the tour, he also made a brief stop in the Canary Islands. After analysing tapes and logs, the following loggings were made:

## AZORES LOG

531 ALGERIA - Ain Beida xlnt w/yl AA chant \& violins, 0120,30 Sep. IRELAND - Tullamore good w/ "Take 5" by Dave Brubeck, 0121, 30 Sep. Also heard evening of $30 \mathrm{Sep} w /$ special coverage of Papal visit to Erie; ancr said stn would be on for 24 hrs a day. SPAIN - Madrid good w/SS family drama, 0122,30 Sep
UNID - German suspected w/rock mx, 0123,30 Sep.
UNID - German suspected w/rock mx, 0123,30 Sep.
MOROCCO - Sebaa Aioun good w/AA mx, 0125,30 Sep.
612
648
666 CANADA - St. John's, NF poor-fair w/EE talk o/SAH's, 0128, 30 Sep, PORTUGAL - Lisboa very good w/PP male vocal, 0130, 30 Sep.
684 UNID - Het, probably CHYQ, 0131, 30 Sep.
Slavic male vocal way under, prob. Yugoslavia, $0132,30 \mathrm{Sep}$ het from something on 692, $0133,30 \mathrm{Sep}$. 56 WEST USA - New York WABC fair-good w/"Someday We'll Be Together Again" by Diana Ross \& the Supremes, 0137, 30 Sep.
01 USSR - Leningrad good at s/on o/GG stn and 800 het (VOWR?); Russian anthem, woman in RR, then "Skating Rink" type orgran mx; followed by $\operatorname{man}$ and woman in RR, 0158-0202, 1 oct. MOROCCO - Rabat extremely loud w/AA mx, 0140, 30 Sep.
PORTUGAL (synchros) fair w/PP talk; the Moroccan on this channel was off at the time, $0141,30 \mathrm{Sep}$.
AZORES - Pt. Delgada local hrd w/soccer in PP, 1705, 30 Sep
USA - Boston WHDH very good, equalling level of 846 \& 855; Jim Sands Saturday Night 0ldie Show heard, WHDH ID @ 0143 , 30 Sep.
SPAIN - Murcia good w/SS family drama $/ / 585,684$ @ 0144, 30 Sep . ENGLAND - BBC fair-good w/"Nobody Does it Better" //909; signal was just o/a strong WCBS het, 0146, 30 Sep . rumble, 0147, 30 Sep
ITALY - Milano good w/time pips, $n x$ in II, then RAI ID and $n x$ in $E E_{\text {; }}$ AA station under, prob. Saudi Arabia, 0300, 1 Oct. $/ 30$ Sep ENGLAND - BBC fair-good w/"Nobody Does It Better song, //882, 0148 CANADA - St. John's, NF CJYQ fair w/Elton John St. John's, NF CJY Lair w/Elt hets, 0149 , 30 Sep.
USA - New York WINS xint w/sports, WINS-1010 ID, 0150, 30 Sep . MOROCCO - Tetouan good w/AA mx, totally dominant, 0151, 30 Sep . UNID - Moroccan or Algerian here w/AA mx weak, 0151, 30 Sep .
044 UNID - Weak AA/ $/ 1062$; Sebaa-Aioun off at the time, $0152,30 \mathrm{Sep}$.
1053 ENGLAND - BBC good w/C\&W mx//1089, $0152,30 \mathrm{Sep}$.
1062 UNID - Weak AA//1044; PP \& II stns. not noted, 0153, 30 Sep.
1080 UNID - Male AA chant o/low growl of hets, 0153, 30 Sep.
1089 ENGLAND - BBC good w/C\&W mx //1053, 0153, 30 Sep., xlnt w/light pop
1120 USA - female ancr in EE, Louis KMOX fair w/talk "Skies are still clear in St. Louis, this has been KNOX news", 0313, 1 Oct.
1134 YUG OSLAAVIA ( 3 sites) male vocal 1143 YUGOSLAVIA 1143 good, $0155,30 \mathrm{Sep}$.
1143 YUGOSLAVIA ( 2 sites) good w/mx $/ 1134$, atop AFN, $0155,30 \mathrm{Se}$ WEST GERMANY - Stuttgart AFN audible u/Yugoslavia; US' footbali game, 0155, 30 Sep.

SWEDEN (tentative) good w/rock song by Dire Straits, 0156, 30 Sep. IRELAND - Cork fair w/"Midnight Blue" mx pgm, 0106, 1 Oct.
USA - Ft. Wayne WOWO fair w/bank ad, Ft. Wayne mentioned @o105, 1 oct USA - Ft. Wayne WOWO fair w/bank ad, Ft. Wayne mentioned e010.
USA - Philadelphia WCAU good w/sports talkshow, 0158 , 30 Sep. ALBANIA - Lushnje xlnt, like a local, carrier popped on \& 8-note trumpet IS was sounded. This was followed by Slavic-sounding talk, 0159-0201, 30 Sep. $\mathrm{w} / \mathrm{freq}$ of 1439 , not $1440,10225,1 \mathrm{Oct}$.

## CANARIES LOG

Stations heard from near Las Palmas on 4 Oct 1979 between 1745 and 1845 GMT.


## CPC TESTS (Continued from page 1)

12/1 CJVB-1470 Vancouver, B.C. 2300 Sat-0100 Sun ELT. Special DX Sat/Sun program by the station. They'll increase to 50 kw . Prepaid calls accepted, number to follow. Reporter from furthest distance will up!
12/2 WVLG-1170 Orleans, Mass. 0400-0530 ELT with 1 Kw D-3. Will be Monday an NRC and PoP test during WWVA's silent period. More details to follow. Arr: Ernie Cooper for NRC.
12/10 KEGG-1560 Daingerfield, Texas. 0300-0330 ELT. Verie signer will
Monday be Rick Hammer, KEGG, P.0. Box 600, Daingerfield, TX 75638. Arr Skip Dabelstein for NRC.

## MEET THE ROCKET \& MISTY

at Ray Arruda's Thanksgiving Weekend GTG, to be held at "The Lower Deck" in Acushnet, Mass., Sunday, November 25. From noon until 6 p.m. you'll pretzels. Your cost is $\$ 2$ to cover a pizza run late in the day. For more information call Ray at (617) 998-3958. His address is 47 Burt St, Acushnet, Mass. 02743.


## DXCHANGE

Well, a few of you read the plea for more ads for the column, but apparently most didn't. Despite a small amount of material, here goes:

FOR SALE - RECEIVERS
HAMMARLUND HQ-145A, features 6 pos. xtal filter, variable depth slot, xtal phasing; with clock and clock manual, $\$ 150$. (Tom Farmerie, 62 Sunrise Ave, Grafton, MA 01519 )
YAESU FRG-7, modified by Grant Manning to include 100 kHz . xtal calibrator \& Collins 2.9 kHz . mechanical filter array. Mint. ex. $\$ 350$ includes UPS in continental US. Cost $\$ 470$ after mods. (Tim O'Hare, 20023 84th W., Edmonds, WA 90820)

HAMMARLUND HQ-180, recently modified, aligned (incl. 60 kHz . IF) and adjuste for peak performance by Steve Bohac. Mods include mixer-trimmer (w/varactor circuitry), tape output, QMult. jack \& tone switch. New power supply. Exc. ex \$350. (Dennis Orlando, 50344 Sylvia Rd., Drexel Hill, PA 19026; (215) HI9-9610)
REALISTIC DX-150A. Make offer. (Terry A. Ward, 4755 S. Braden, \#501, Tulsa, OK 74135)
WANTED - MISC.
VU-meter and 0-500 uA meter, matching pair, 1/211 dia. circular holes for R-390A. (Farmerie)

MORE ADS for DXChange (ye editor)
FOR SALE - RECIEVER
(received at HQ)
DYMAK DR-33. Pick up or will mail. $\$ 700$ or best offer. (Mike Deitz, 1412 Sierra Arch, Virginia Beach, VA 23456; (804) 427-2477)

1979 NRC HAM OPS LIST (CONTINUED)

| Call |  | Class | State | Name | Ops |
| :---: | :---: | :---: | :---: | :---: | :---: |
| WB8 | BHU | T | OH | Bob Leamy | $2+$ QRP 80/40/20 |
| WB8 | BYE | G | MI | Mark Mitchell |  |
| K8 | NDY | T | OH | George Greene | inactive |
| WD3 | NVM | N | OH | Pat Flanagan |  |
| WA2 | QBC/8 | N | OH | Paul Mount |  |
| WB2 | VGD/ $/ 8$ | G | OH | Bob Galerstein |  |
| KA9 | EZA | N | III | Norman Geuder |  |
| W9 | BG | E | WI | Ross Hansch | 80-20 |
| WD9 | IRV | N | II | Alan Mayer | 15/40/80 |
| K $\varnothing$ | AKK | G | мо | Dave Fischer | inactive |
| Kø | LOK | G | CO | Bob Greenlee |  |
| Kø | SBV | A | KS | Carl "Skip" Dabelstein | 10/80 CW |
| VE2 | AQP | B | PQ | Andy Rugg | $3.5,14,21 \mathrm{mHz} \mathrm{CW}$ |
| VE3 | CKU |  | ON | Ron Sibbitt | $6 S S B+2 F M$ |
| VE? | AZG | A | BC | Dave Bennett | $160 \mathrm{~m}-450 \mathrm{mHz}$. |
| VK4 | zSS |  | Australia | Sam Dellit |  |

***** OK, that's it. If you are a ham but aren't listed, or if your info is either incomplete or incorrect, then you didn't submit the info as per my request of a couple of months ago. If you never sent me any info, all I have are generally taken from my ' 76 Callbook. Updaters will be published periodically, and donations of more recent callbooks if you're through with them would be appreciated, hi, since this is one of the few uses I put one to. 73's de WB2BJH.

Here are the graveyard DX achievements for $1240 \mathrm{kc} / \mathrm{khz}$. Some really impressive distances both before and after Jan1, 1960. For stations not listed, no record has been submitted. So, let's get em in. Deadine for 1340
*** 1240 kc ... before Jan 1, 1960 ***

| TI | ON \& LOCATION |
| :---: | :---: |
| WEBJ | Brewton AL |
| WULA | Eufala AL |
| WMPT | Florence AL |
| WJBY | Gadıdeñ AL |
| WWW | Jasper AL |
| WCOV | Montgomery AL |
| KBYR | Anchorage AK |
| KWJB | Globe AZ |
| KOFA | Yuma AZ |
| KFPW | Ft Smith AR |
| ¢HOZ | Harrison AR |
| KWAK | Stuttgart AR |
| KHOM | Eureka CA |
| KDON | Monterey CA |
| KPPC | Pasadena CA |
| KRKS | Ridgecrest CA |
| EROY | Sacramento CA |
| KRNO | San Bernerdino CA |
| KSON | San Diego Ca |
| ESTMA | Santa Maria CA |
| kSun | Susanville CA |
| xCOK | Tulare CA |
| KRDO | Colorado Springs co |
| ESLV | Monte Vista CO |
| KUBC | Montrose CO |
| KCRT | Trinidad CO |
| WWCO | Waterbury CT |
| WLCO | Eustis FL |
| WINK | Ft Myers FL |
| WMMB | Melbourne FL |
| WFOY | St Augustine FL |
| WGAC | Augusta GA |
| WBHB | Fitzgerald GA |
| WLAG | La Grange GA |
| WBML | Macon GA |
| WPAX | Thomasville GA |
| WTWA | Thomson GA |
| *KBIZ | Ottumwa IA |
| KVNI | Couer d'Alene ID |
| KEYY | Pocatello ID |
| KWEI | Weiser ID |
| WCRW | Chicago IL |
| WEDC | Chicago IL |
| WEBQ | Harrisburg IL |
| WTAX | Springfield IL |
| WSDR | Sterling IL |
| WHBU | Anderson IN |
| KWLC | Decorah IA |
| KGLO | Mason City IA |
| KICD | Spencer II |
| kIUL | Garden City KS |
| KAEE | Wichita KS |
| WTME | Louisville KY |
| WFIM | Maysville KY |
| KaLb | Alexandria LA |
| KAPK | Minden La |
| KANE | New Iberia LA |


| DXer and Lecation | MILEAGE |
| :---: | :---: |
| Gene Allen Vallejo CA | 2060 |
| Gene Allen Vallejo CA | 2150 |
| Norm Maguire Albuquerque NM | 1040 |
| Gene Allen Vallejo CA | 2050 |
| Gene Allen Vallejo CA | 215 |
| Gene Allen Vallejo CA | 2075 |
| Gene Allen Vallejo CA | 2700 |
| Hank Holbrook Chevy Chase MD | 1910 |
| Gene Allen Vallejo CA | 575 |
| Norm Maguire East Hartford CT | 1210 |
| Norm Maguire Albuquerque $\mathbb{N M}$ | 730 |
| Norm Maguire Albuquerque NM | 815 |
| Gene Allen Vallejo CA | 215 |
| Gene Allen Vallejo CA | 110 |
| Stan Morss Bradford PA | 2500 |
| Gene Allen Vallejo CA | 310 |
| Don Kaskey Galva IA | 1370 |
| Stan Morss Bradford MA | 2400 |
| Norm Maguire East Hartford CT | 24,00 |
| Norm Maguire Albuquerque $\mathbb{N M}$ | 770 |
| Norm Maguire Albuquerque NM | 790 |
| Gene Allen Vallejo CA | 210 |
| Gene Allen Vallejo CA | 955 |
| Gene Allen Vallejo CA | 890 |
| Gene Allen Vallejo CA | 790 |
| Norm Maguire East Hartford CT | 1675 |
| Frank Wheeler Erie PA | 360 |
| Norm Maguire Albuquerque $\mathbb{N M}$ | 1455 |
| Gene Allen Vallejo CA | 2510 |
| Ralph Speriy Fairfield CT | 950 |
| Gene Allen Vallejo CA | 2420 |
| Gene Allen Vallejo CA | 2290 |
| Norm Maguire East Ha,tford CT | 840 |
| Gene Allen Vellejo CA | 2130 |
| Gene Allen Vallejo CA | 2200 |
| Gene Allen Vallejo CA | 2240 |
| Frank Wheeler Erie PA | 610 |
| Gene Allen Vallejo CA | 1610 |
| Norm Maguire Albuquerque $\mathbb{N M}$ | 1010 |
| Norm Maguire East Hartford CT | 1960 |
| Norm Maguire Albuquerque NM | 810 |
| Norm Maguire Albuquerque NM | 1090 |
| Gene Allen Vallejo CA | 1860 |
| Gene Allen Vallejo CA | 1840 |
| Norm Maguire East Hartford CT | 850 |
| Gene Allen Vallejo CA | 1745 |
| Norm Maguire East Hartford CT | 665 |
| Norm Maguire Albuquerque $\mathbb{N M}$ | 975 |
| Norm Maguire East Hartford CT | 1020 |
| Norm Maguire East Hartford CT | 1120 |
| Ralph Sperry Fairfield CT | 1350 |
| Gene Allen Vallejo CA | 1370 |
| Norm Maguire Albuquerque NM | 1200 |
| Gene Allen Vallejo CA | 2090 |
| Gene Allen Vallejo CA | 1765 |
| Norm Maguire Albuquerque NM | 750 |
| Frank Wheeler Erie PA | 1060 |

Gene Allen Vallejo CA
Norm Maguire East Hart Norm Maguire Albuquerque NM
Iorm Maguire East Hart ford 0
Norm Maguire East Hartford CT
maguire East Hartford CT
Norm Maguire Albuquerque NM
Nomm Maguire Albuquerque NM
Norm Maguire East Hartford CT
Gene Allen Vallejo CA
Gene Allen Vallejo CA
Frank Wheeler Erie PA
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Norm Maguire East Hart
Frank Wheeler Erie PA
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Norm Maguire East Hartford CT
Norm Maguire East Hartford CM
Gene Allen Vallejo CA
Norm Maguire Albuquerque NM
Norm Maguire Albuquerque NM
Norm Maguire Albuquerque NM
Norm Maguire East Hartford CT
Nom Maguire East Hartford CT
Frank Wheeler Erie PA
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Gene Allen Vallejo CA
Gene Allen Vallejo CA
Norm Maguire East Hartford CT
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Norm Maguire East Hartford CT
Prank Wheeler Erie PA
Norm Maguire East Hartford CT
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Norm Maguire East Hartford CT
Pete Taylor Chattanooga TN
orm Maguire East Hartford CT
Frank Wheeler Erie PA
Norm Maguire East Hartford CT
Norm Maguire East Hartford CT
Norm Maguire East Hartford CT
Gene Allen Vallejo CA
Gene Allen Vallejo CA
Norm Maguire East Hartford CT
Gene Allen Vallejo CA
Sone Allen Vallejo CA
Norm Maguire Albuquerque NM
Norm Maguire Albuquerque $\mathbb{N M}$
Norm Maguire Albuquerque NM
Norm Maguire Albuquerque NM
$\begin{array}{ll}\text { Norm Maguire } & \text { Albuquerque NM } \\ \text { Nom Maguire } & \text { East Hartford CT } \\ \text { Horm Maguire } & \text { East Hartford CT }\end{array}$
Sorm Maguire East Hartford CT
Horm Maguire East Hartford CT
Horm Maguire East Hartford CT
Frank Wheeler Erie PA
Horm Maguixe East Hartford CT
Pete Taguirer Miami FL
Fete Faylor Miami FL
Horm Maguive Bast Hartford CT
$\begin{array}{ll}\text { Norm Maguire } & \text { Bast Hartford CT } \\ \text { Mom Maguise } & \text { Albuquerque Mint }\end{array}$
Hom Maguise Albuquerque
Gon Maguive Vllouguarqu Vallejo CA
Gene Allen Vallejo CA
Gone Allen Vallejo CA
Gone Allen Vallejo CA
Gone Allen Vellejo CA
Gone Allen Vallejo CA
Gone Allen Vallejo CA
Gene Allen Vallejo CA 160

Mom Maguire Albuquerque Mir
1850
1585
Hon Maguire East Hartford C
Horm Maguire Albuquerque
Morm
Maguire Albuquerque ip



Nom Mr uire Albuquerque im
Norm M. uire Eant Hartforl C: Pete Taylor Durhacy NC Genc Allen Valle: CA Gene Allen Valle o CA Noma Masuire Zast Hartford C:
Geno Alien Valle of Gene Allen Valle to CA
Frank hieeler Frie PA Frank wieeler
Gene Allen Valleio PA
 Norm Maguire. East Hartford CT Norm Maguire
Gene Allen Vallejo CA Norm Masuire Albuquerque NM Gene Allen Vallejo CA
Gene Allen Vallejo CA Norm Maguire East Hartford CT Norm Maguire Albuquerque MM
Norm Masuire Alb:juorque NM Norm Maguire Albi:junrque MM Norm Nasuire East Hartford CT Norm Maguire East Hartford CT Gene Allen Vallejo CA Gene Allen Vallejo CA Gene Allen Vallejo CA Gene Allen Vallejo CA
Gene Allen Vallejo CA Norm Masuire East Hartford CT Norm Masuire East Hartford CT Gene Allen Vallejo CA
Bruce Conti West Warwick RI Rich Eddie St Louis MO Robert Kramer Chicago II Jerry Robertson Croswell MI Carl Dabelstein Lincoln $N$ Gene Allen Vallejo CA
Karl Jeter Atlanta GA Rich Edaie St Touid MO Rich Eddie
St Louis MO
Bill Hardy
Aberdeen WA Nancy Herdy Aberdeen WA Gene Allen Vallejo CA Norm Maguire Albuouerque NM Gene Nix Billings MT Gene Allen Vallejs CA Bob Coomer Ojai CA Dave Margritz Omaha NE
Gene Allen Vallejo Gene Allen Vallejo CA Steven Miller Boston MA Ron Schiller Monmouth Beach NJ Jerry Starr Hubbard OH Andy Rusg Montreal PQ Gary Atkins Louieville KY John Buehler Toledo OH Dave Whatmough Hamilton OH
Jeff Falconer Clinton Carl Dabelstein Lincoln $N$ Jeff Kosnett Charleston WV Mike Heppe Houston MS Carl Dabelstein Omaha NE Deve Mareritz Omaha NE Ernie Cooper Provincetown MA Dave Margritz Omaha NE Wayne Heinen Buffalo NY Carl Dabelstein Omaha NE Dave Margritz Ominta NE Carl Ditelstein Outaha NE Dave Margritz Oraha NE Dan Phillips Tall.doga AL Carl Dabelotein Ocaha NE Carl Daberistoin Owha NE Carl Lhibrilatein Lincoln NE Bryan Los Brooklyn CT
Ron Musco Wind:or CT John Buehler Toledo OH
KLDA Ridgecrest CA KROY Sacramento CA KBON San Bernerdino KRDD Colorado Springs co GO Durango Co KDGO Durango Co WWCO Waterbury CT WINK Ft Myers FL WMMB
WFOY
St bourne FL WFOY St Augustine FI BHB Fitzgerald GA Gainesville GA La Grange
Macon GA
Macon GA
Statesboro
Statesboro GA
Thomesville GA
McCall ID
Chicago IL
Chicago IL
Harrisburg I
Springfield IL Sterling I
Decorah IA
Ottumwa IA
KIUL Garden City KS
CAKE Wichita KS WIMF Louisville KY $\begin{array}{ll}\text { WIFG } & \text { Somoraet KY } \\ \text { KhaE } & \text { New Iberia LA }\end{array}$ WCOU
WJET AI Greonfield MA

WOCB West Yarmouth
WCBY Cheboygan MI Cheboygan M
$\begin{array}{ll}\text { IJIM } & \text { Lansing MI } \\ \text { CPRM } & \text { Park Rapids MN }\end{array}$
WJON St Cloud MI WMPA
WMIS
KTMO Aberdeen MS Natchez MS
Flat River MO Flat River Mo
Jefferson City MO M Nevada MO
KEMY Billings MT
$\begin{array}{ll}\text { KLITZ } & \text { Glasgow MT } \\ \text { KBLL } & \text { Helena MT }\end{array}$
$\underset{\mathrm{KYOH}}{\mathrm{KBHL}}$
Lincoln NE
KODY
KELK
KSNJ
$\begin{array}{ll}\text { NK } & \text { North Platte NE } \\ \text { Elko NE } \\ \text { Briden NJ }\end{array}$ WSNJ Bridgeton NJ
KHHA Carlsbad NM KCLV Clovis NM WGBB Freeport WGVA Geneva NY WJTN Jamestown NY WD Schenectady NY ST Charlotte NC Elizabeth City NC
Raleigh NC Raleigh NC
Devil's Lake Devil's Lake ND
Youngstown OH Elk City OK Pendleton OR
Roseburg OR Roseburg O WRTA Altoona PA
Civil Defense Ph
Civil Defense Philadelphia P
USEA Selinsgrove PA
WBAX Wilkes-Barre PA
WWON Woonsocket RI
WWON Woonsocket RI
WKIK Newberry SC
WKDK
WDXY
Numberry SC
$\begin{array}{ll}\text { WDXY } & \text { Sumter SC } \\ \text { KCCR } & \text { Pierre SD }\end{array}$
tie


# NRC MEMBERSHIP BY STATE 

ALABAMA BIRMINGHAM-Phillips TUSCALOOSA-BARTON - CARBON HILL-CHILDERS HUNTSVILLE-Holland
$\frac{\text { ALASKA }}{\text { ANCHORAGE-Jenkins PALMER-Woodward FAIRBANKS-Fischer }}$
ARIZONA
MESA-Schneider
CALIFORNIA
LOS ANGELES-Grandi, Bstandig EL SEGUNDO-Ingrum MANHATTAN BEACH-Bittner PACIFIC PALISADES-Woods PALOS VERDES ESTATES-Hill PLATA del RAY-Herr GEACH-Watson PASADENA-Browne ENCINO-Schlessinger NORTHRIDGEFinkle, Hardison GRANADA HILLS-McIntosh THOUSAND OAKS-Santulli GLENDORA-Reynolds UPLAND-Guerin CHULA VISTA-Hanavan, Seaver ENCINITAS Sheedy ESCONDIDO-Manning FALLBROOK-Rideout SAN DIEGO-Boley, Lobel, Dome, Hardester TWENTYNINE PALMS-Meehan CRESTLINE-Moseley WRIGHTWOODYoung RIVERSIDE-Erickson TUSTIN-Corby GOLETA-Riordan OJAI-Coomler OXNARD-Bergman SIMI VALLEY-Nelson SANTA BARBARA-Eldred ATASCADERO Plew SQUAW VALLEY-Kirchman FRESNO-Markarian LOS ALTOS HILLS
SAN FRANCISCO-Kaskey, Taylor, Moriyama, Goodlett, Kelly, Dilbeck, Segalas SAN FRANCISCO-Kaskey, Taylor, Moriyama, Goodlett, Kelly, Dilbeck, Segalas Wong PALO ALTO-Satterthwaite FOSTER CITY-Pietsch ALAMEDA-Bostwick
LIVERMORE-Lehr NEWARK-Tobia VALLEJO-Allen ALBANY-Vroom BERKELEYChilds CUPERTINO-Phillipson SANTA CLARA-Pruden SAN JOSE-Wien MANTECA-Bratton MERCED-Berthelsen MODESTO-Pejza SANTA ROSA-Wilkinson ARCATA-Freeman, Tomer MAD RIVER-Glass SACREMENTO-Wright, Schwartz ETNA-Spencer RED BLUFF-Critchett
COLORADO
LITTLETON-Sedgeley BOULDER-Greenlee LONGMONT-Bruner COLORADO SPRINGS-Heinen BUENA VISTA-Fithian

CONNECTICUT
PAWCATUCK-Schackner BLOOMFIELD-Rosow COLLINSVILLE-Kearman WINDSOR-Musco BROOKLYN-Lee, Rukakoski PRESTON-Dailey FAIRFIELD-Yocis NORTHFORD-Fregeau SOUTHPORT-Sperry STRATFORD-Collins, Staff BRIDGEPORT-Rychalsky, Kenyhercz BETHEL-Kemp DARIEN-Vitti NORWALK-Mazanowski WESTPORT-Jarrett STAMFORD-Lucas, LeVine, Kosinski

## DELANARE

DISTRICT OF COLUMBIA
Townshend, Bull
FLORIDA HOLLY HLL-Ritayik ST. AUGUSTINE-Perko JACKSONVILLE-Sang PANAMA CITY BEACH-Wolf PENSACOLA-Barfield, Thomas CASSELBERRY-Krueger DELTONABowles PLYMOUTH-Conrad ORLANDO-Hidden, Whaley PALM BAY-Hagan MARGATE-Schatz MIAMI-Hyder WEST PALM BEACH-Sahlbach DUNEDIN BEACHGustafson LAKE PANASOFFKEE-Cantrell SARASOTA-Parsons TAMPA-Lockwood Mitkus IMMOKALEE-Kennedy
GEORGIA
AUSTELI-Poole DECATUR-Hutton, Jeter, Ranck MARIETTA-Hart STONE MOUNTAINSherman CARTERSVILLE-Edwards ATLANTA-Maxwell, John Harris, Shearer, Phil Harris ROSSVILLE-Hunter HARLEM-Wilson AUGUSTA-McCullough

HAWAII

IDAHO BOISE-0'Riordan

ILLINOIS
CARY-Pesek FOX LAKE-Bartels GRAYSLAKE-Couture NORTHBROOK-Madeley WAUKEGAN-Pokatiloff NORTHFIELD-Topel DeKALB-Zacks ELMHURST-Sherwood NORTHLAKE-Macko VILLA PARK-Kirschmer CALUBET CITY-Barkas NEW LENOX Hallberg OAK LAWN-Bertonz PALOS PARK-Betscher PARK FOREST-Onyschuk, Mayer OAKBROOK-Zumstein NAPERVILLE-Nemec RIVERSIDE-Higgins
Strickert, Geuder, Sabella ROCKFORD-Eisentraeger GALESBURG-ings, Pistek
PEORIA-Clemmer BLOOMINGTON-Brown CHAMPAIGN-Hathaway RANTOUL-Hal
CHARLESTON-Steele BELLEVILLE-Giannini EAST CARONDELET-Stratmann
SPRINGFIELD-Tinsley, Wright MOUNT VERNON-Callarman CARBONDALE-Roberts
INDIANA
INDIANA EAST CHICAGO-Hupke MUNSTER-Newman HAMMOND-Zondlo GOSHEN-Baker WARSAW-Plummer WABASH-Durbin JEFFERSONVILLE-Howley CRAWFORDSVILLE-Jones

IOWA
GRINNELL-Pollock OSCEOLA-Morris WEST DES MOINES-Hoogerheide DES MOINESBiermann, Mahoney, McIntire DUBUQUE-Kruse MAQUOKETA-McMurray SPRINGVILLE-Beard CEDAR RAPIDS-Mann DAVENPORT-Scheel

## KANSAS

OVERLAND PARK-Dabelstein, Keeney MORAN-Swearingen EMPORIA-Cline NEOSHO RAPIDS-Kitt MUNDEN-Houdek

## KENTUCKY

BLOOMFIELD-Gillis WESTPORT-Walker LOUISVILLE-Fleischaker, Reed, Atkins Peters, Willis, Anderson, Roppolo JEFFERSONTOWN-Hartlage, Truax LAWRENCEBURG-Thompson LEXINGTON-Short BROOKSVILLE-Bay AUXIER-McCown

LOUISIANA
METAIRIE-Rebennack EUNICE-Smith RUSTON-Lankford
MAINE TOPSHAM-Chituk PORTLAND-Smith SOUTH PORTLAND-O'Connor AUBURNPeterson PERRY-Washburn
MARYLAND
CHEVY CHASE-Holbrook, Matthews HILLCREST HEIGHTS-Blazek BLADENSBURG Crabill BOWIE-Rouse GAITHERSBURG-Knab KENSINGTON-Seeliger ROCKVILLEEngelberg, Davis WHEATON-Gangler ABERDEEN-Brainerd, Hartung BEL AIRTuggle COLUMBIA-Feidt, Kosnett HAVRE de GRACE-Johnson BALTIMORE Jensen, Gregory, Sevier, Hutchinson ANNAPOLIS-Stillwell SALISBURY-Brown

## MASSACHUSETTS

CHICOPEE-Nowak SOUTHWICK-Waterman SPRINGFIELD-Drumm ATHOL-Haggett HUBBARDSTON-Kangas LUNENBURG-Ruggles GRAFTON-Farmerie HOLDEN-Bailey SHREWSBURY-Kapinos WORCESTER-Grant ACTON-Sullivan BEDFORD-Rosinski WAYLAND-Engberg BILLERICA-Connelly CHELMSFORD-Walsh BRADFORD-Morss LYNW-Russell CANTON-Feldman DOVER-Skinner FOXBORO-Whittier HINGHAM-Cooper WALPOLE-Moore DORCHESTER-Miller MATTAPAN-Porter WEST ROXBURY-Greenberg ALLSTON-Good CAMBRIDGE-Coughlin NEWTON CENTRE-PROVINCETOWN-Cooper FALL RIVER-Remy ACUSHNET-Arruda WESTPORT-Moniz

LIVONIA-Feldman DETROIT-Haberman, Jozwiak, Campbell GROSSE POINTEChristian OAK PARK-Rubin CROSWELL-Robertson DAVISON-Blue, Slater GOODRICH-MCAbee GRAND BLANC-LOVell BURTON-Benkinney BAY CITY-Pruden LANSING-Whitacre, Foltz KALAMAZOO-Sarkozy STEVENSVILLE-Brown MUSKEGON-Parker SPRING LAKE-Boersma MARQUETTE-Wyman HOUGHTON-Legler
MINNESOTA
ST. PAUL-Lovegren MENDOTA HEIGHTS-Bredvold CHANHASSEN-White SILVER BAY-
Jensen GRAND RAPIDS-Wendt DULUTH-Maki WOLVERTON-Johnson Jensen GRAND RAPIDS-Wendt DULUTH-Maki WOLVERTON-Johnson
$\frac{\text { MISSISSIPPI }}{\text { HOUSTON-Heppe JACKSON-Ayers GULFPORT-Washofsky }}$

MISSOURI
CLAYTON-Fischer ST. LOUIS-Langeneckert, Breville, Perkins WEBSTER GROVESEddie KIRKWOOD-Fortner ST. PETERS-Buehler, Essman WARRENSBURG-Hunn
KANSAS CITY-Lewis, Kelly, DeRoo MOUNTAIN VIEW-Gill SPRINGFIELD-Northup MONTANA
MISSOULA-Ammons
NEBRASKA
FREMONT-Franklin OMAHA-Lindblade, Wesolowski, Margritz, Sampson
LINCOLN-McCoy, Zank HASTINGS-Uerling
NEVADA
LAS VEGAS-Rand RENO-Toebe
NEW HAMPSHIRE
NEW JERSEY
CAEW JERSEY CLIFTON-McGarry EAST ORANGE-Ledoux FAIRVIEW-Bohac MONTVILLE-Kromka WEST ORANGE-Straus COLONIA-Crocker RUTHERFORDDuckworth S. PLAINFILLD-Fela BELCK SthE-Adelmann KINNELLON-Edmunds AIN LAM ROCKAWAY-Bernstein BERNARDSVILLE-Kulow MORRIS PLAINS-Kocsan, Linzmayer Sharp VINCENTOWN-Walters WENONAH-Larmer OCEAN CITY-Hoffman Morgan NORTH WILDWOOD-Gollotto MILLVILLE-Paradies EAST WINDSOR-Goldberg HIGHTSTOWN-Jones PRINCETON JUNCTION-Bowker ROEBLING-Arey LAKEHURSTCruser PERTH AMBOY-Hicks, Reilly

## NEW MEXICO

ALBUQUERQUE-Schmelzer, Maguire DEMING-Thompson
NEW YORK NEW YORK-Bingham, Moro, Nordstrom, Taylor, Foxworth, Imprescia, Seitz, NEW YORK-Bingham, Moro, Norastrom, Taylor, Foxworth, Imprescia, Seitz, Harrison, Smith, Chan, Feldman STATEN ISLAND-Clarius, Bergadano, Hann NEW HYDE PARK-Galerstein ASTORIA-Vonderembse BROOKLYN-Grant, Bernstein, Flynn, Dunnavant, Ridge, Weinbrum RIDGENOOD-Hoare BEECHHURST-Hafter Flynn, Dunnavant, RISGE, Fader JACKSON HEIGHTS-Wishnewitz ELMHURST-Loy JAMAICA-Podall ATLANTIC BEACH-Gray BALDWIN-Borowski GARDEN CITY-Ray LONG BEACH-Martin MALVERNE-Brodsky OCEANSIDE-Spitzer VALLEY STREAM-Fox FAR ROCKAWAY-Ceder BAYVILLE-Monti KINGS PARK-Gilbert DELMAR-Bezilla ALBANY-Quaglieri, Holland SCHENECTADY-ALLEN CLAY-Nordquist SYRACUSE-Regan MANNSVILLEChattert on ENDICOTT-Petrick HAMBURG-Rader LOCKPORT-Ly on NORTH TONAWANDA-Juen KENMORE-Neimanis CALEDONIA-Herkimer FAIRPORTBartek ROCHESTER-Bond, Mitchell, Knox LIMESTONE-Glover CORNING-Lord

NORTH CAROLINA
WINSTON-SALES-Hoke CHAPEL HILL-Brann, Tindall ROCKY MOUNT-Colean ELIZABETH CITY-Luton CHARLOTTE-Holmes, Ponder HNMLBT-Parks
SNOW HILL-Erdmann BANNER ELK-Todd
NORTH DAKOTA
BISMARCK-Oml id MINOT-Van Wormer
OHIO REYNOLDSBURG-Leamy COLUMBUS-Flanagan, Mockus, Bursack, Cummins, Lamb, Wallace KENTON-Lovett TOLEDO-Siegel, Buehler, Merrill OREGON-Buehler NORIFW DD-Mr CUY AHOGA FATLS-FOglesong, Lukosavich ROOTSTON-Friedl AKRON-Green CUYAHOGA FALLS-Foglesong, Lukosavich ROOTSTOWN-Friedl AKRON-Greene, Poda GIRARD-Parillo HUBBARD-Starr LISBON-Prancis NILES-Rattay WARREN-CINCINNATI-Jeffrey, Elsaesser, Green, Ringgenberg, Kenneally DAYTON-Dean Anderson KETTERING-Gebhart, Ruckman CHILLICOTHE-Leedom NELSONVILLEMount NEWPORT-Eddy

OKLAHOMA
LAWTON-Stuart DUNCAN-Thomas BUPFALO-Rogers HOOKER-0sborn TULSA-Tudenham, Ward BILLINGS-Allen

## OREGON

HOOD RIVER-Williams ASTORIA-Williams TILLAMOOK-Nolan PORTLANDCunningham, Wardell, Block SALEM-Ladouceur CORVALLIS-Woods EUGENE-

## ENNSYLVANIA

CORAOPOLIS-Kotfis PITTSBURGH-Gwardzinski, Gehringer, Carrington, Heller Mozlack FOREST HILLS-Etheridge BROWNSVILLE-Janecko BEDFORD-Cessna MURRYSVILLE-Shiels PUNXSUTAWNEY-Brauner PORTAGE-Barno SARVER-Waldron ELLWOOD CITY-Turner KITTANNING-Cooper ERIE-Steward, Wheeler, Yourkovik ALTOONA-Albanese OSCEOLA MILLS-Bezilla TYRONE-Simpson STATE COLLEGEDennhardt MECHANICSBURG-Basehore MIDDLETOWN-Breon WRIGHTSVILLE-Smeltzer YORK-Myers WILLIAMSPORT-Herman, McCourt BETHLEHEM-Holt EASTON-Dimmick Walton NAZARETH-Waha WALNUTPORT-Geary ALLENTOWN-Feltman GOULDSBORO Hayes MOSCOW-Jacobs FORTY FORT-Cox NEW MILFORD-Stover CHALFONT-
Fitzherbert CHURCHVILLE-Smith ARDMORE-Sayen HUNTINGDON VALLEY-Holland Fitzherbert CHURCHVILLE-Smith ARDMORE-Sayen HUNTINGDON VALLEY-Holland
DREXEL HILL-Orlando WALLINGFORD-Dangerfield PHILADELPHIA-Nelson, Kowalski, Temple University Library, Dunn, DiFilippo, Dickter, Eckman WEST CHESTERLeon HATFIELD-Sulak NORTH WALES-Evans SPRING CITY-Melis READING-Fox

RHODE ISLAND
ASHAWAY-Brown EAST GREENWICH-Adamson PAWTUCKET-Kazaross CUMBERLANDHealy WEST WARWICK-Conti

PAWIUCKET-Kazaross
SOUTH CAROLINA
SUMTER-Earnhardt GREENVILLE-Mulfinger FORT MILL-Lordo
SOUTH DAKOTA
YANKTON-Heckenlively MILBANK-Stengel ABERDEEN-Wild
TENNESSEE
NASHVILLE-Crowder, Murphy, Fain KINGSPORT-Mottern ALCOA-Francis KNOXVILLE-Hauser MILLINGTON-Marshall, Van Horn

## TEXAS

PLANO-Rust CEDAR HILL-Bates DALLAS-Hoover, Phillips, Godin, Schiller BELLS-Morris HOUSTON-Bigley, Sorensen, Gordillo BAY CITY-Samer PASADENA-Durocher CROSBY-Eaves BEAUMONT-Worst SAN ANTONTO-Hackett KINGSVILLE-Lackey CORPUS CHRISTI-Krueger LEANDER-Lamb AUSTIN-Carr SNYDER-Gaston FORT STOCKTON-Beckett
$\frac{\text { UTAH }}{\text { BRIGHAM CITY-Pimper }}$
VERMONT
COLCHESTER-Curtis RICHMOND-Jackson
VIRGINIA
FIRGKE-Nissen FAIRFAX-Merriman FALLS CHURCH-Kennedy, Powis, Thompsen
VIENNA-Jones WOODBRIDGE-Sapp ARLINGTON-Macgill, Ariderson, White, VIENNA-Jones WOODBRIDGE-Sapp ARLINGTON-Macgill, Ariderson, white, Montgome NFACH-DEitz NORFOLK-Bailey NEWPORT NEWS-Burke PORTSMOUN VIRGINIA Lagattuta

BELLEVUE-McHarg EDMONDS-O'Hare, Jones LYNWOOD-Buretta SEATTLE-Meyer Ryan, Portzer, Babcock MARYSVILLE-King ABERDEEN-Hardy SPOKANE-Harms

WEST YIRGINIA
CHARLESTON-Dotson HARPER'S FERRY-Ludwig PARKERSBURG-Monroe HENDRICKS-DeLeurere
WISCONSIN
KENOSHA-Jensen MILWAUKEE-Steadman, Strickert, Cook, Steele, Rieger Golembiewski MIDDLETON-Paulsen MADISON-Marx, Lazar, Hansch SEYMOURLester DENMARK-Cieslewicz, Cieslewicz MARSHFIELD-Wurl TOMAHHeinzelman APPLETON-Schafer NEW LONDON-Hansen

WYOMING
LARAMIE-Nix CASPER-Fisher
PUERTO RICO
SAN JUAN-Gleason

## ALBERTA

CALGARY-Kesteven, Tworow FOX CREEK-Stonebridge
BRITISH COLUMBIA
BURNABY-Harries COQUITLAM-Rimmington SURREY-Bennett, Oldfield
VANCOUVER-Grossman VICTORIA-Hall-Patch

## MAN ITOBA

LEAF RAPIDS-Sorensen SWAN RIVER-Belanger WINNIPEG-Copeland, Wasylik, University of Manitoba DX Club

## NEWFOUNDLAND <br> ST. JOHNS-Messenger

NEW BRUNSWICK
ST. JOHN-Doherty, Stark

ONTRLINGTON-Loney CLINTON-Fal coner HAMILTON-Whatmough LEAMINGTON-Reh MISSISSAUGA-Gittings OAKVILLE-Loewen ORILLIA-Rossiter OTTAWA-Beaudoin, Johnson, Osborne PRESCOTT-Dulmage SARNIA-Sibbitt SCARBOROUGH-Clark Hought on TORONTO-Griffiths, Kerfoot, Littek, Scrimgeour WILLOWDALE-Segal WINDSOR-Kul backi

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\(\frac{\text { QUEBEC }}{\text { ILE des SOEURS-Rugg RIVIERE du LOUP-Viel ST. LAURENT-Morissette }}\) SASKATCHEWAN
YUKON
ELSA-Vernon
```

Veries from
E. H. Eisentraeger of Rockford, Illinois

WA6XAI - 1550 Bakersfield, Calif

## Official Verification from High EFildily W'roudicustiny Eiation w6xat <br> 1000 WAATTS <br> 193.5 METERS <br> . 1550 KLLOCYCLES <br> NAME EDMZRD H. EICENTRAEGER ....DATE JAN, 7, 1935 This acknowledges as well as verifes your report of having received transmissions frum this station on. DEC. 28 s $1234 \ldots \ldots . .$. Your co-operation and interest is appreciated by the entire staff.  PIONEER MERCANTLE EV CO GAKENSFIELO. CALIFORNIA



WMBO - T? khs
Auburn, W.Y.

Kansans
Gary
Houdek (L)
and
Paul
Swearingen
confer

a. 2

For those of you who will join us next Labor Day in L.A., this is your host...John Clements. He is also editor of the Questions and Answers Column for NRC.

NRC's man in Mt. Vernon, Illinois, John Callarman. This is the fellow whose dedication to the hobby has resulted in the NRC DOMESTIC LOG, the finest publication of its type in the world:



Nashville's Wayne Murphy, former LAD and LPC member

Californian Jim Critchett combined a visit to Colorado with both IRCA and NRC Conventions.


This group successfully convinced Ron Schatz to fork over cold cash for a 51J4. (L to R) Don Erickson, Ted Flywheel, Mike Buehler and host, Lou Buehler.


## SOME 'EASY' TA'S

## Dallas Lankford © 1979

666 PORTUGAL Lisbon (synchro) Schedule 24 h Programming primarily light $m x$ interspersed w/ PP announcements and often $\frac{\text { comments }}{\text { w/ short }}$ time pips on the hour ( 4 long - 1 short), of MA this year, best time $0500-0600$ GMT, they were a been heard in Austin during the spring of 1977 but have no been heard by me since, according to NiRTH-79 the
"Radiodifusao Portuguesa", see WRTH-79 for IS.

765 SENEGAL Dakar Schedule: 0600 (Sut 0700)-0100 GMT Programming, mainly AA chanting Commentst $\mathrm{S} / \mathrm{on}$ is usually just before $0600 \mathrm{w} /$ IS (brief melody on stringed instrument), FP announcements $\&$ nx(?), and into AA chanting years of low sunspot activity, this year it has been heard years of low sunspot activity, this year it has been hean sunset on a car $r x$ or TRP), this has consistently been easiest African for deep NÁ continental listeners, those of us in the south usually must wait for 765 EL SALVADOR YSKLD to $\mathrm{S} / \mathrm{off}$ about 0600 .

774 SPAIN Caceres/Valencia/San Sebastian Schedule: 05000100 GMT Programming 1 light and classical mx Comments not reported outside of MA this year, though I heard them several times during the spring of 1977 . in Austin, $\mathrm{S} /$ off about 0100 w/ 6 time pips, R. Nacional de Espana ID, and
12 note IS, see WRTH-79 for is.

1035 PORTUGAL Porto Alto Schedule 0600-0200(Su:0500-0100) GMT Programming: similar to 666, light mx, including accordian Euitar mx, group vocals, individual singers, flute mx, ( 4 long - 1 short), "Radiodifusao Portuguesa" ID, best time about 0500-0700, s/on recently noted 0600, heard this year in LA, MA, NY, \& RI, see WRTH-79 for IS.
1206
FRATiCE Sordeaux Schedule: 0458 (Su: 0558)-2300 GIMT Proframming, mainly FP talk, though AA and Turkish(?) have been reported 0500-0530 Comments t noted by me in necently ecenth, seen no IS has been mentioned in recent reports.

1404 GUINEA Kipe (Conakry) Schedule, 1230-0830 GMT Programming FF \& vernacular talkers, instrumental omments, their carrier is more rezularly and widely reported than SENEGAL 765, but low modulation (compounded by periods of $O C$ ) makes them more difficult to hear, best times are from your local sunset to local GUINEA sunrise ( $0700-0730$ ), heard this year in CONN, D. R., FLA, LA, \& MA, see WRTH-79 for IS (though no IS reported recently).
1467 MONACO Monte Carlo Schedule: 0445(0430)-0000 GMT Propramming religious Comments s/on seems to be 0445 before S \%n, S /on sequence is IS, anthem, GG announcement and $\mathrm{LA}, \mathrm{VA}, \& \mathrm{PA}, \mathrm{S}$ /off is reported in SS at 0000 from my personal experience this one rates as the easiest European in recent years, see WRTH-79 for IS.

1557
FRANCE Nice Schedule: 0458 (Sui0558)-2300 GMT Proeramming $\mathrm{FF}, \mathrm{AA}$, Slavic(?), and perhaps other languages $w /$ talk $\&$ various kinds of mx Comments , it
seems likely that some reporters have confused Nice $\mathrm{w} / \mathrm{f}$

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NALTA Cyclops which relays a DW AA program 0400-0600 or later, heard in GA, ILL, LA, MA, PA, \& RI, best 0500-0630, rarely produces audio for me, see WRTH-79 for IS (though none reported recently).
1593 WEST GERVINAY Langenberg Schedule 24 h (?) Prosramming mainly MoR $m x \& G G n x \&$ talk, heard recently in ILL, LA, $\mathrm{HA}, \mathrm{MS}, \mathrm{NJ}, \& \mathrm{RI}$, Brahms Lullaby IS (there is some says IS is a 7 note motif from "In allen guten Stunden" by L. Beethoven, and if the 1593 transmitter carries the second or third program, two other IS's are possible).

It is probably incorrect to call any TA reception easy unless you live in the northeast or near the Atlantic coast. As a general rule, an rxw/ good selectivity (mechanical filters, Q-multiplier) and a good loop or long wire in a quiet location are manditory prerequisites.

The above list was developed from reports to IDXD of DXN from Jan.-Sept. 1979, my log, and WRTH-79, $78,76,863$. There is some disagreement among the sources, and in some cases 1 have guessed. The list represents those TA's most likely to be among the first few TA's you will hear. DC listeners with a good rx will likely log most or all of these easily, but those of us further inland (not to mention wc listeners) find them a real challenge.

Some veteran DXers may have a different opinion, but mid-Feb. to mid-Apr. has traditionally been the most productive period for me. During the last year or so I have heard no TA's below trend is likely to with the possible exception of SENEGAL 765 . One of the most peculiar features of TA DX is that even strong 'TA's of ten have no audio. I do not know if that is because many TA's have low modulation or if there is some other cause. A typical TA opening in north Louisiana (or central Texas) might manifest itself by a fair-good carrier from GUINEA $1404 \mathrm{w} / \mathrm{no}$ audio in the early evening hours ( $0100-0300$ ). By $0400-0430$ if MONACO 1467 is present, I will scan the band for other carriers. It is impossivie to brief or last an hour or more sometimes to openings may be orier, or local European sunrise. Recent efforts to scientifically predict TA openings have been much less than completely successful, and there is no substitute for regular listening. Even during the current high sunspot level, persistence will reward the determined listener. And be sure to keep an eye on reports to DXN for schedule and programming changes.

From
$\frac{\text { QST }}{\text { Magazin }}$


## TERMINATOR TRANSIT MECHANIX

## Rónald F. Schatz

## Part IV \& TXM "E" Calculations

The primary purpose of IXM calculations is not to predict when a station will fade in or out but when it will start and stop doing so. Since MW stations can take an hour to fade in at sunset and out at sunrise, to say that a given station will fade in at, say, 6:12 PM is really possible to predict the exact times that a station will start and stop fading in or out. This is good news not only for TA and TP DX, sut for "domestic" DX'ers working sunrise and sunset skip (SRS and SSS) as well. Hearing a rare catch at sunset need no longer be a matter of luck; now one can predict the "critical window" between first audible skip and the onset of QRM; i.e., when the station may be heard in the clear. The traditional practice of using local sunrise/sunset (ISR/LSS) to predict fade-outs and fade-ins has an inherent error of almost an hour, no match for TXM's accuracy, using the globe/string method about to be described, of $\pm$ two minutes!

Now, it is a legitimate assumption that TXM calculations involve calculus, complex equations, etc. that are over the head of the average for its realisation and never claimed to accomplish what iXM does, so we understand the reader's possible line of thinking. The fact is that anyone with a high-school education can perform TXM calculations with ease (unless we're underestimating the declining quality of North-American public-educational institutions).

Before we begin, the "TXM student" should have the following items on hand:

1) A world globe, preferably a l2-inch-diameter Replogle or larger.
2) A tape or other means of measuring distances on the globe.
3) A string or chord 12 inches or longer.
4) A length of garment elastic.

Prepare the garment elastic as follows:

1) Cut off about a six-inch (unstretched) portion.
2) Stretch out the elastic fully, then pin or anchor both ends on a flat surface.
3) Inscribe even-spaced marks along its length at half-inch intervals (Figure 1):

$$
\text { Figure } 1
$$

If absolutely necessary a wide rubber band may be so prepared instead, but it is not recommended. In lieu of any elastic whatsoever, one may perform necessary mathematics (simple division) using the mileage/kilometrage tape alone (Item no. 2 above).

In Part III we explained the concept of the primary transfer zone (PTZ) as part of ionospheric transfer propagation theory, and we assume the reader to be familiar with

1) At E-layer heights (about 62 miles or 100 kilometers):
a) Ionospheric sunrise occurs one-half skip distance earlier than
ground sunrise.
b) Ionospheric sunset occurs one-half skip distance later than ground sunset.
2) Maximum effective range of a single E-layer hop is about 1000 miles or 1600 kilometers.

Figure 2 illustrates the first point above; sunset at the E laye just above the transmitter corresponds to sunset on the ground midway down the signal path.


The ionospheric E layer is responsible for the overwhelming proportion of MW sky-wave propagation; all skip known as "SRS" and "SSS" is E propagated. Whe three IXM parameters denoting E-transfer events at sunrise and sunset are Er, Es, and Pe; they are defined and limited as follows:
Er - the time when a signal stops fading out at sunrise, normally marThe time when a signal stops fading out at sunrise normally marEs - the time when a signal starts fading up at sunset, normally marking its first appearance. Also "debut time" or "first audio".
Pe - The end of the evening fade up or the start of the morning fade out period, the signal averaging some $14 \%$ above mean nighttime levels, thus an optimum time to listen. Also "pre-sunrise peak" or "post-sunset peak".
It is very important to note that a signal may "stop fading out" without ever fading out completely. "he author believes that a hypo-" the air; $i$ no station ever fades out completely but remains at an undetectably faint level throughout the day. ER. ES, and Pe are merely undetectably faint level throughout the day. enge in signal behaviour; they are not loo guarantees of points $\frac{\text { of }}{\text { recep }} \frac{\text { change }}{\text { or non-reception. Most of the time, however, Es will mark }}$ reception or non-reception. Most of the time, however, es will mark


Temporal parameters $\mathrm{Er}, \mathrm{Es}$, and Pe are " E " parameters, since they assume transfer propagation via the ionospheric E region. "F2" parameters Hr, Fs, and Pf will be covered in an upcoming article.

Now let us define Er and Es again, but this time in geodesic terms:
Er - Locsl sunrise at the midpoint of the first skip zone crossed by the terminator.
Es - Locel sunset at the midpoint of the last skip zone crossed by the terminator.
For signle-hop paths, these become the midpoints of the paths. In theory, then, if LSS at the transmitter is 1730 and ISS at the receimiles. The nature of great-circle paths, however, distorts this simplified picture, since such paths are non-linear.
'emporal parameters Er and Es are the most important in $1 \times X M$; they form the bases for calculating almost all of the other parameters. For tunately they are the easiest to calculate. The three-step process is simple:

1) Determine the minimum number of "E" hops along the signal path, using the "1000-mile rule"
2) Locate the midpoint of the terminal hop on the globe (the reciprocal of twice the hop number).
3) Calculate the time of terminator passage across the point.

Exercise 1): At what time will KFi-640 start to fade in for $\varepsilon$. DX'er living in Chicago on 21 March?

1) the mileage tape indicates that Chicago and Los Angeles are some 1700 miles apart. that's between 1 and 2 thousand miles, so the minimum number of "E" hops is two.
2) Double the number of hops determined in Step One: $2 \times 2=4$. Po-
sition the prepared lergth of garment elastic on the globe so that Chicago and Los Angeles are 4 marks apart (Figure 4):


Since sunset will occur later in Los Angeles than in Chicago, the on-path mark just out of Ios Angeles is "2Es". Mark that point on the
globe with a marking pen (Ballpoints and pencils can permanently damage the globe surface; avoid them).
3) Use the terminator-tracking techniques described in Part II of this series to calculate the time of sunset at point "2Es" (located near the Grand Canyon), $2 \mathrm{Es}=1925$ (ST) .
Parameter Es is reciprocal: For a DX'er in Los Angeles, Uhicago stations will start to fade in at 1725 PST on that date.


Figure 5 is a schematic diagramme using official TXM parametric symbols (cf. Part I of this series). Note how 2Es is half a skip distance on the ground but corresponds to the point above Gunct on a layer. Since we cannot directly measure ionospheric sunset on a globe, Remember, a sky-wave signal does not bounce off a tiny overhead point halfway along the path. Let's try another exercise:
Exercise 2): At what time will Radio Sénégal (Chaine Nationale)-765 stop fading out on the morning of 22 September for a DX'er in Boston?

1) Hhe distance from Boston to Dakar is about 3700 miles. using the " 1000 -mile rule" for maximum E-skip distances, that's $\underline{4}$ "E" hops along the path.
2) Double the hop number - $\frac{8}{-}$. Position the elastic on the globe so that boston and Dakar are 8 marks apart. The first mark west of Dakar is "4Er"; merk it on the globe.
3) Find sunrise at " 4 Er " - 0631 UTC or 0231 EDT.

Now let's switch to the other coast:
Exercise 3): When will Shanghai-1044 start to fade in for a DX'er in San Diego on 21 December?

1) Distance is about 6600 miles; that's ? "E" hops.
2) Double the hops - 14 . Position the elastic on the globe 14 marks from San Diego to Shanghai. Mark the first one just east of Shanghai - "7Es".
3) Sunset at "7Es" on 21 December - 0243 PST or 1043 UTC.

TXM can be useful for deciding controversies, as we shall see:
Exercise 4): A DX'er in Washington, DC, reportied weak reception of Stavanger-1314 on 21 December at 0430 EST. A lot of his compatriots gid he really hear the station?

1) Washington to Stavanger -3700 miles, or 4 " $E$ " hops.
2) "Reciprocal of the double" $-1 / 8$ distance along the path out of Stavanger. 8 marks apart with the elastic.
3) LSR at "4Er" on 21 December is 094? UHC or 0442 EST.

Our DX'er in Washington did hear Stavanger at 0430 and had 12 more minutes to do so. ISR at Stavanger, by the way, was 0340 EST , a late 0940 CET at that northern locale. In theory, a DX'er in Stavanger could hear WTOP-1500 until 1042 IT; TXM is reciprocal.

Again, TXM should find its maximum utility during sunrise and sunset skip (SRS and SSS), when some staticns can be heard for only a couple of minutes at a time. Capturing those precious few moments before rive at the event on schedule. A plenned DX session at SSS (as at any other time) will always yield more fruitful results than an unplanned one, as we are about to prove:

For our example, let's consider a New York City DX location on the 2l'st December. The frequency we shall monitor is 640 kHz , also allowing for activity on 639 kHz at this time of year. First, we search through the current WRTH to get ar idea on possibilities; of course, most of the stations be impossible to hear, TXM or no From arong these possibilities we choose eleven stotions, calculate Fs for each and arrange the in order of "appearance" of "appearance":

## STATION

RNE (639)
CBN
Rádio Cabugi
(DX shack)
RADIKA
France Regions 3

## WHLO

Ondas Porteñas
La Voix du Seigneur Radic Liberación La Voz de Santa Marta Radio Liberación
$\frac{\text { LOCATION }}{\text { La Coruña }}$
St. John's, NF Natal, RN New York City Paramaribo Guadeloupe Akron, OH Puerto La Cruz Fort-au-Prince Las Mercedes Santa Marta
La Habana

| MILES |  | HOPS |  | ISS |
| ---: | :---: | :---: | :---: | :---: |
|  | Es |  | Es |  |
| 1150 | 2 |  | 1443 | 16043 |
| 4000 | $4 / 5$ | 1535 | $1615 / 25$ |  |
| 0 |  | 1628 | 1628 |  |
| 2700 | 3 | 1631 | 1630 |  |
| 1800 | 2 | 1637 | 1636 |  |
| 400 | 1 | 1656 | 1643 |  |
| 2700 | 3 | 1700 | 1654 |  |
| 1550 | 2 | 1715 | 1706 |  |
| 1400 | 2 | 1734 | 1717 |  |
| 2050 | $2 / 3$ | 1735 | $1723 / 28$ |  |
| 1300 | 2 | 1745 | 1731 |  |

The list looke promising, but condjtions may prohibit all from being received. With solar flux levels below 70 for several days at a time, Kádio Cabugi ("cah-boo-ZHEE") should be possible for 3 or 4 minloupe should be far easier, standirg out clearly in French. A conadeversial brand of DX could be Las Mercedes (CMKH) without CMQ for some 14 minutes, but beware of sporadic E! § Where two Es Eimes are listed for a station, these are borderline situations where the exact number of hops is unknown. In such cases, calculate Es for both possibilities, then see which one works, using that information for future calculations for that particular path.

The presence of sporadic $E$ is extremely difficult to predict; it distorts TXM calculations by causing reception sometime before Es and past er. Sporadic Florida we have "Venezuelan nights" offected in lower latitudes. Finhanced reception of Caribbean stations during geomagnetic (auroral) disturbances is a result of sporadic E; TXM may not work well at such times.

Temporal parameter Pe, the opposite end of the fade curve, is indicative as follows:

1) The station has stopped fading up or has started fading out.
2) The signal level is some $14 \%$ better than average (assuming the absense of F2 skip).
Pe is most useful for weak or heavily-QRM'ed signals, when the DX'er wants the best time to listen. Random fade-outs at time Pe are extremely rare, so the best chance of reception is normally at that time.
3) Find "Er" or "Es", as appropriate, on the globe.
4) Find the point one hop distant from the above in the direction of the sun (perpendicular to the terminator front on the daylight
5) Calculate ISR or ISS, as appropriate, at "Pe".

Exercise 5): When is the best time for Seattle DX'ers to hear Honolulu stations on the evening of 21 June?

1) First calculate "Es": 2700 miles, 3 hops, "3Es" is $1 / 6$ out from Honolulu.
2) Trayel NW from "3Es" a distance of $1 / 3^{\prime}$ rd the signal-path length at
294 bearing. Call that point "3Pe". (Figure 6).
3) LSS at "3Pe" is 2307 PDT or 0607 UTC, the best time to hear Honolulu from Seattle that evening.
Figure ? will help to orient the reader as to why "3Pe" is out in "left field": The third PTZ along the Seattle-Honolulu path is shifted with respect to the ground one-half skip distance toward the sun. As
stated earlier in this article, $E$ and $P$ are ground reference points cor stated earlier in this article, $E$ and $P$ are ground $x$.
responding to terminator transits in the ionosphere.

$0_{G 1}$


Our final exercise will make use of both temporal parameters to help us $\log$ two rare Atlantic DX countries:
Exercise 6): Use TXM to determine the possibilities for logging the Azores and Madeira from Miami on 30 October or 11 February.
With assistance from the WRTH-79, we choose the following targets:

| 603 | MADEIRA | Funchal I | 4 hops |
| :--- | :--- | :--- | :--- |
| 837 | AÇORES | Ponta Delgade | 4 hops |

Also to be considered are possible sources of interference to our target stations, f:

| - | way. |  |  | Er |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 603 | FRANCE | Lyon | 5 hops | 0227 | EST |
| 837 | FRANCE | Nancy | 5 | 0233 |  |
| 837 | CANARIAS | Las Palmas | 4 | 0309 |  |

Las Palmas may be a needed catch in itself as well as QRM for Ponta Delgada, so let's calculate 4 Pe for her as well. Vector one hop at
105 true (ESE) from "4Er", $4 \mathrm{Pe}=0150$ EST.

It is difficult to determine exactly when Nancy will fade out enough for Las Palmas to arrive on top, since diurnal conditions vary beyond the by 0233, leaving Las Palmas' dying signal in the clear for 36 minutes more, when it, too, disappears at 0309.

4 Er for Funchal is calculated at 0317 EST ( $1 / 8$ down the path). With Lyon gone by 0217, that's 50 minutes in the clear for Madeira, but since the signal may be hard to copy near 4 Er , let's calculate 4 Pe for the best possible signal:

Vectoring one "E" hop FSE from point " 4 Er " (bearing $105^{\circ}$ ), $4 \mathrm{Fe}=$ 0215 EST. This is greet news; Mndeira will be at its best while France gasps its last two minutes, being far too weak ty then to interfere much at all!

Now for Ponta Delgada; $4 \mathrm{Fr}=0353$ FWT. With the Canarias gone by 0309, that's 44 minutes on a clear channel. But let's get it at its best:

Vector $105^{\circ}$ from "4Fx" at $1 / 4^{\prime}$ th path length, $4 \mathrm{Fe}=0257$ EST. Well, Ponta Delgada doesn't come on until 0300 , per WRTH, but that's hardly critical.


A graphic representation of the situation on 837 kHz may be seen in Figure 8. France, of course, will be overwhelmingly strong until after 2 AM, then Canarias should be dominent urtil 3, when Açores signs on. The channel will be dead by 4. The little circles, by the way, are approximate E2C times, where the signal has dropped co dB below the original nighttime level (voltage-wise), per Nelson's definition. cover E2O (and E4O, etc.) in our rext entry on TXM.

In summary, the basic object of TXM "E" calculations is to be of use during SSS or SSS DX'ing, either domestic or foreign. Calculate pe to determine whe reived Calculate ISS only to determine when to turn on the lights in your room.

Exercise 7): Pick any day of the year. For your particular location, calculate the following for WWL-870 New Orléans:

1) Time of first reception at dusk.
2) Time of best evening reception.
3) Time of test pre-dawn reception.
4) Time of last reception at dawn.

You may sukmit your answers to the author at his current adiress; a verbal grade, along with the correct figures, will be sent to you in reply. No cheeting, please!

## ADDENDA - "Es-1"

We mentioned previously thet sporadic E can interfere with TXM predictions in unpredictable ways. Another factor con also tend to nullify the usefulness of parameter $E$ - a weakened D reoion. During the months of October through February, especially during years of low solar -flux levels, the region may become so weak as to permit sky-wave reception in broad daylight, lons beiore Es and long after Er. At such times, the next-to-last hop on multi-hop paths mey deteraine reception possibilities;i.e., the preceding FTZ will control first and last reception. As illustrated in irure 9 , the temporal parameter to calculate is Es-1, or "penultimate Es". To calculate Es-1, juct fo 3 marks over (instead of one) on the elastic, then find lss for that point.

During outstanding conditions there may even be an Es-2: The phenomenon associated with Es-l is a normal occurrance on the 60-meter tropical band.

## SUNRISE SKIP DX

Part I: Pre-Sunrise Authorities

## Robert Kramer

To follow is the first in a three part article on sunrise skip DX, entitled PSA's. Part II covers clear channels and part III deals with special conditions produced during aurora. This series is the culmination of ? if I did no DX other than sunrise, I would have 805 stations logged, not including most clear channel stations and many easy regional and local channel regulars.
Probably the easiest and fastest way to $\log$ new stations is to DX sunrise skip. At this time of day, it is possible to log several new stations in the span of one or two minutes. Sunrise DX also has one other feature every morning form of propagation can claim; it is different almost on the region. There are few stations that can be called pests, or least the fact that channels. This is due to the low power of the PSA's and號 stations are sunrise interesting, since some of the 50 kw clear channel stations are located on the east coast. When their local sunrise time has passed, the signals begin to waken, allowing stations with lower power
The first type of sunrise DX that the beginner is likely to encounter is the PSA and it is likely that you may already have gotten a few without knowing about it. PSA stands for PreSunrise Authority. It is a special authorization from the FCC to operate before local sunrise. The PSA is used in months that local sunrise occurs after 6:00 AM local time. The hours of PSA use are from AM to local sunrise. operates at 500 watts or less), never exceeding 500 watts. Some stations have PSA's as low as one or two watts (this low power is found on clear channels), but they are rarely used because of the small coverage area. Most PSA's are close to the 500 watt maximum or full power if station power is less than 500 watts.
Nearly every daytimer on regional channel frequencies has a PSA, plus some full-timers who use their daytime facilities to better serve their clear channels there are also is lower than the night power. on some the sunrise of the protected 50 kw station has passed. No station on 1560, for example, may use a PSA until after New York City sunrise, thus protecting WQXR. The clear channels having PSA are: 640, 650, 660, 680, $710,730,750,770,800,810,850,860,870,880,900,1000,1040-1110$, $1130,1140,1170-90,1210,1220,1500-1530$ and $1550-1570$. There are no PSA's on local channels.

Now that you are aware of what a PSA is, and where to find one, it is time to put that knowledge to use. All you need is a good case of insomnia or a lot of will power. Depending on where you live, you may have to get up as early as 3 AM to look for them. Though you may drag yourself out of bed half asleep*, within the next few minutes you should completely wake up. This is due to the results! You will be amazed how well 500 watts can get out, even with a 5 kW pest on the same frequency.
The technique I suggest is to determine your clearest regional channel frequency; if you live in the Eastern Time zone pick a frequency with no local. After doing so, go to that frequency and stay there from 0558-0601 ELT. On a good frequency, under the right conditions, it may be possible to ID 5 or more sign-ons in this short time period. To effectively DX sunrise, a tape-recorder is almost essential. This is particu You will find running the tape-recorder from 0558-0601, since many sta You wiln without warning. Also, a station that could be easily IDed may be too weak to show up an open carrier sign-on before you get the recorder on, get it going as fast as possible, and of course leave it on if something is coming on late. Another possible system, the one I use, is to have the tape recorder running constantly. of course, this requires a second tape recorder to make dubs of the signons onto a master tape.
*unless
unless you are Karl Forth, then you will shut the alarm off and return to bed:

DXers living in the Central, Mountain or Pacific time zones don't have to give up on PSA's after the Eastern sign-ons. Every hour until 0600 PLT station using PSA's will sign-on. DXers living in the Mountain or Pacific time zones may choose to wait until the Central or Mountain PSA's and good time for a West Coast DXer to bag an Eastern time zone PSA).
After a few days of DKing sunrise you will probably become hooked and want to do every morning, As you work this propagation mode mor and sit there waiting for something to sign-on; rather, tune around, 100 for signs that something is about to come on. Things to look for besides the Star Spangled Banner are rooster crows, America the Beautiful, Dixie, open carrier, or extremely live music that seems out of place on the channel. If you are using a tape recorder, don't bother playing tapes back if you couldn't quite make out the call letters of a station signing on. Wait until you notice no more. The tape can always be played back later, and you could miss something truly rare. As you become more familiar with sunrise conditions, you will begin to know frequencies that have strong stations that make lolng a PSA dirlcul. some mornings on that frequency because you will likely hear something out of the ordinary.
After the PSA's have signed-on, don't give up. There is still more to hear; this through what I call the scan. It is simply tuning up and down the band as many times as possible, stopping on each open regional channe out, then move along. Just keep tuning from frequency to frequency for the entire hour, or until local sunrise if you live on the East Coast, until the next PSA sign-on period. Following this procedure, it should be possible to tune across the entire band 4 or 5 times. This is impor tant as stations using PSA's have a tendency of fading quite a bit. A station that is in strong now will probably be gone in another minute. Many times the number of stations operating on a frequency will make it sound like a graveyard channel. Don't let this discourage you. I know from experience that PSA's do fade in and with strong signals.
Well, that does it for regional channel PSA's. Any questions you have Robert Kramer, 3406 West Pierce, Chicago, IL 60651 . A self-addressed, Robert Kramer,
stamped envelope will assure you of a much faster reply.

## COURTESY PROGRAMS COMMITTEE

NEIL G. ZANK P.O. BOX 5563
LINCOLN, NE 68505

I have volunteered to take over as the chairman of the Courtesy Programs Committee. Our thanks should go to retiring chairman Jerry Starr who has served in this position for some several years. The CPC is no more or less than the group or club members wils. tombers. At present it only consists of two or three people out of the entire membership.

All you have to do to become a part of this important area of the club is to express your interest and willingness to help. We will be able to suggest methods and quidlines, plus supply sample material. We will work for a coordinated effort to provide Tests this year and in the future.

The only key to having a number of Tests on the air is the volume of requests and suggestions which the club members get out. There will only be one or two successes out of every twenty attempts. You can see how important the volume will be. Those of us actively involved on the committe want and a part of the CPC effort. With a consentrated effort we can key upon needed states, provinces, cities or what have you.
"Captain Glotz needs you!"

## (10) COLLEGE FOOTBALL STATION LIST

These 1979 college football listings are courtegy of these NRC, IRCA, of $G$ WDXA DXers: Eddie Ryan, Pete Nolan, Tim Cronin, Konn Carr, Mark Strickert, Paul Mount, Lynn Gillis, Ken Cnyschuk, Bruce Portzer, Pote Taylor, Al Quaglieri, Bill Harms, Mike Endza, Dave Murl, and Mike Bernardin, plus tips from all three club bulletins.
gdited and compiled by Bill Hardy, 2301 Pacific Avo., Aberdeen, WA, 98520,
thee isue. This 33 of

## $\frac{\text { Haker afleld College Renegade }}{\text { George Pevletich }}$

1560 IPMC-CA
"B1g Ton Game of the Week" THREE FEEDS:
Feed At Lou Boudreau, Vínce
720 WGN--IL
Feed B: Merle Harmon ... $790 \mathrm{KABC}-\mathrm{CA}$

Boise State Broncos
1160 KSI--UT
CR1.-Davis Ageios Rich Howe,
1530 KFBK-GA Contral Michigan Chippowas $\frac{\text { Chico State Mildeats }}{\text { Catern Mahington Sarages }}$ Prorida stata Seminoles 1090 mus-MI 1290 KHSL-CA 1440 KXXR-MA 1440 KXRR-MA
610 WIDFromo Stato Bulldoge

610 M KND-MA
$580 \mathrm{KJ}-\mathrm{CA}$
$\frac{\text { Idaho Vandals }}{630 \text { KDO-ID }} 1270$ KTLC-ID
(and others)
Sllinois Flghting Illini
Feed As Bromar Notwork"
(and others)
$\frac{\text { Illinois Flighting Illini }}{\text { Feed A: Bramar Not work }}$ BEVERAL FEEDS
$780 \mathrm{MBBM}-\mathrm{IL}$
$1320 \mathrm{MKAN}-\mathrm{IL}$
$130 \mathrm{MJOL}-\mathrm{IL}$ (and maybe of the other s)
Foed unknow but carry Illilnols football:


Vanderbilt Commodore Meshington Huskies Bruce King

# 650 WSM-T 

 560 kPQ Bob Rondeau, Gary Johnson 610 KONA-MA $1230 \mathrm{KSPO}-\mathrm{MA} 1430 \mathrm{KBRC}-\mathrm{MA}$ 880 KOMM-NA* 1240 KXLE-NA 1450 KONP-NA
 930 KSIB-OR* 1290 KLIQ-ORA 1490 KLOG-MA $1000 \mathrm{KONO}-\mathrm{MA} \quad$ ( $\mathrm{no} \mathrm{MM}^{\prime} \mathrm{s}$ )

1. Note that $\frac{\text { two }}{\text { stations in Bellingham }}$ ( 790 and 1170 ) carry Meshington footbal Mashington State Cougars Bob Robert son 920 KILY-MA $1250 \mathrm{KMSN} \mathrm{MA} / 1490 \mathrm{KTEL}-\mathrm{MA}$ $\begin{array}{ll}960 \text { KALE-MA } & 1290 \text { KAPY-MA* } \\ 1230 \mathrm{KOZI}-\mathrm{MA} & 1340 \mathrm{KAGT}-\mathrm{MA} \\ \text { (plus } 4 \mathrm{MM}^{\prime} \mathrm{s}\end{array}$ KREM-MA KWWV-MA

Since we're so close to the end of college football season, this will likely to the final listing for 1979. Wo now shift our sights to COLLEGE BASKETBALL, and please send dotail of college coverage to Bill Hardy, 2301 Pacific Ave., Abordoen, Ma, 98520 , now! Thenks!

## SOME LATIN AMERICAN HISTORY

## C6́sor Ob 110

As an information to Chuck Hutton (and to everybody else) who in IdxD dated October 22, he says thet "it is unknown whether there is any signifiesnee to the large number of countries celebreting their independence on September 15" I have this to sey:

Yes, there is. Berly in the Wineteenth Century all Centrel Americen countries Coste Ries, El Selvedor (then nemed or known as Soconuseo), Guatemala, Honduras (lnown as comayegua) and Nioeregue were Spenish colonies, all or them a pert of Capitanie Genere de Gusteme la, with the government seat on this city. On Soptember 15, 1821, Gabino Gainza, last Spanish governor declared the territory independent from Spein, at the same time Costa Rice, El Salvador, Henduras and Nica these nem countries decided to join Iturbide power, But Iturbide wes forced to abdicate on merch 1825 and these countries then formed the "Federación de Provincias Unidas de Centro Amárica" by themselves. But political discontent forced this Federation to be dissolved, so Guatemala seperated on April 1839; Nicaragus on April 30, 1838; Honduras on November 5, 1838; Costa Rica on Nowember 1838 and E1 Salvador on January 31, 1841. but they atill celebrate their independence dey on the dete they deoided to be free from Spain: September 15, 1821.

As to the Cuben independence, it is celebrated on rebruary 24 by exiled $\mathrm{cu}_{\mathrm{s}}$ bens, or Pre-Cestro Cubs, or the dey when the fight ageinst Spain sterted on Ye bruary 24, 1895, Right now the celebration dite is on July 26 in cormemoretion the fight egeinst Hetista. I said falled sttack, bedause the attack was really a fallure as most of the attackers, including lestro were taken as prisoners and loter deported to Mexico.

But anywey in the list there ore two other countries misaing: Haity and Panamá. Haity wes the second oountry in the Western Healsphere, after the United States, to be free. Their independence dates beck to Jamuary 1st, 1804. They were slaves and a French colong. Un Februsry 4, 1794, they started the fight headed by Toussaint L'Ouverture, a slave who at the time was a generel in the Frency Anuy, out hes bis feated the Prench arny and the indepandence as proclaimed on January 1st, l804-

Panemé celebreted the independence on November 3, the day they aeparated from Colombia. Peneme first declared its independence from Spain on June 22, 1826 and joined Gran Colombis, then romed by Colombie, Venezuela and Ecuador, but on November 3, 1903, separeted from Colombis in order to stert the construction of the Panamá Cansl with the United States help after the French company had to sell the rights becouse of tropicel diseases.and failure.

The opinions expressed in this column are those of the individual members and do not necessarily reflect those of the editors, publishers or NRC.

##  <br> HARFY HAYES - 9 Henry Street - Wilkes-Barre, Pennsy 1 vania - 18702

some urnsual ones have been showing up from the midwest. At the same tiri. As a result some urneual ones have been showing up from the midwest. At the same tire mumerous Euro
poan hets have been showing up on the high ond of the band during the weok of $10 / 24$. Allouis, France, has also showed up on $164 \mathrm{kc} / \mathrm{s}$. on the evening of $10 / 13$, I beliove. Here is what's been happening of late. $10 / 14-7 \mathrm{pm}$, WDLw-1330 Walthsac, Kass, showing up w/Green Bay - Detroit FB gane on the Mutual Network. Bxcellent overpowering signal, and firat time heard. Now some umasual stuff to the midwest. 10/17-6:58pu, WNDE-1260 In1. w/rr \& IDs 7:12pw, FTHI-1480 Terre Haute Ini. in w/c/w \& IDs "Country Fresin WTHI." 10.18-7:15pm, 涊2


CATGTES SEVERAL NET ONBS ON CALL Changes
JOSEPH W. BRUUNER - R. D. 1 - Box 153 - Punxeutmenay, Pomnay lvania - 15767
10/23/79
intorestal as over. Thanicarting on a new seeson, my 53rd in DX, mostly $1 \mathrm{NF}_{\mathrm{F}}$. $\mathrm{I}_{\mathrm{m}} \mathrm{m}$ atill the LPC, plus all other hari working elitors. JIM CRITCHETT sont a Convention brochure ; seams I misasi a nice party. No matter now long you DX, happoning will occur that boost the oll spirit. Like that opening announcesent from WKRP-1500 on the car RX - or my own expa- ience with WPXN, ex-wROC-1230. I had made several midnight tries for CJTN-1270 and
FPXN, FPXN, but on $1270 \mathrm{itis}^{2}$ always WXYZ on top. Um WLIK noted aigning off soveral times at 12 midnight. One night I left the RX wet on 1280 after WKST folled another WPXN try ; \& turno It on $38: 45$ sm next morn to tune a local feature. Before the dial was touched I heard "Hoch 'no' so I kept listening \& after more local itens cene a clear WPXN ID \& TC $\circ 8: 55$ with sun an hour high. WPXN is the 175th call from N.Y. hore. DXing of late has beon limited and resulte oven lese - just 'padaing' the los witin aall changes. WMMQ, ex-mWSF, exiij, on day
 24; MFFM, ex-NLOA-1550, another somi on daytime ES. This one like to ID as "FM-97" but does give mi call now and then, seldiom on tine hour, \& of course, WPXN. That ts the news
here. Wishing all a very good DX season. 73.

BILL TOWNSHEND - 4500 Connecticat ANTICIPATING HIS ANTARCTICA TRIP
 crumble for the NFC Bast titlo. The ooys from the Land of Steel and of in the heat of the in D.C.) as WWSK-970, the ancient and venerable KDKA-1020, "KTQ-1320 (ox-WJAS), WTAE-125) (ex-WCAE), $z^{2} K Q V-1410$, w/KKTQ \& EQV NSP, nave won the Series on the road hyre in the Land of Pleasant Living. WKTQ nas stronger signals than our local yoikel WEEL-2310. WMAL-630 hai
 ink Lown my attempts at KXOK. KEAW-1330 in Evanston, III. has gone goapel unier the nes all $\mathbb{F} P R 2$, iropping its otinnic format. I see a couple of DX GTGs listed for T-giving weozioni in Seattle ani Cincy (Nelsoriville). The TADXA is having a GTG at JOHN ROUSE's paid in owio, K1. on Sat. $11 / 3$. (No sleet cr icy rain expected tinat night, hi). Although एADXA i parei moetly to SkLs, several NRCers, incluiling yours truly, will be there. Fe had five
T-storms so far this wonth, incluiing one luring an early-season snows toru (trace hers, isu
 it's Sumer again, Inlian style, witn $82^{\circ} / 38$ :c the last two days. How ger a coll front is the way \& may cause an=ther T-storin with OEN tomorrow aftornoon. This is tha n.0st ros torms
 lesving the DC-Baltimprearea gazain until tha Antarctic trip from tid-January unt in won't be ruary. JofN allchin, I'll be in Auckiani in the ovaning from mid-January intil late Fe: States. I'll overnight at tas Intercontinental Hotel. Thas trip will knock out eix to

 4530 s 7 y to the 3.458057 s powe (that $i_{s} 73$ ) do kPT .

ON EXPANDIN THE BROADCAST BAIT
MAL $\alpha$ LM MAXELLi - Atlanta, Goorgis
*........ I have a bit more info on KKRP if Dallas, Gas. It runs low in an untenn. pattorn aimed $E / k$, whicn insluies part of the hetro Atlanta atea in ito primary eorvice are
 c9iva i let-ar witn a tape in it from a man in Decitar. (Vonaer hac that was?) daso on the


Maxvell, conld I hare put a little thought on the ideas of aithar expaniing the BCB and setting ap a longwave broadcast band. Expanding the present band up to 1750 or 800 kHz would be easy, but it would take a while for new receivers to come on the market in any mumcoverage, or mbunchn the hi ghing even worse. Lw, presuring that the aviation people will fust get up and move quietly, has even more problems. 1. Very few current recejvers in homes cover this band. Given the cheap design \& construction practices in the coneumer slectronica industry, (no FF or preselector stago, mall forrite antenna, with broed tuning, \& poor sensitivity \& selectivity in the IFs, the price of "going longwave" wouli be high, without the promise of better fidelity, no static, or sterso sound to justify it to the public. 24 The image problem a strong $D$ IN station would cause to $M M$ listoners as well ae telephone and other RTI would pe a strong deterrant to the FCCts muthorieing IM broadoast ing. Sorry atout this boing a long Musing, but the next one will be short. Good DX.

## A HAPPY ' HOMESONING:

JOHN SAMPSON - 1714 South 84 th Street - Omaha, Neiraeks - 68124
Greetings from Omaha. Since wolve moved again \& since I've mot Mused for a couple of years, this is the interesting to start at a lacation with 900 -plus verios instand of 0 as proviously. here - interesting to dart at DXing with new job, now home, otc., but I am finding some new (or changed) otation on the dial here. Varies in from KVRA-15iO, KUXI- 157 Q, KBKM -1560 , \& KQYX-1560 in July, taic-
 BIL has moved about five miles dioser \& splatters all over. 1270 thri 1310 are unlistona ble day \& night :Dow. Befors, these wore good frequencies (except, of course, for 1290). YFAB sleo seens worse - \& mich moremixing between tham \& KOIL. Also I forgot to mention MHiwestorn T-atorms. Too mach static to do mach of arything until the ond of Soptember. I noted on myfrive out hers a TIS station near Davenport, Ia. on 1610. Also, the Avoca, Ia, TIS on 1610 outiot is off the air now, as is an enorgoncy information station near Atiantic, a. which was on 1210 ror road com got some time for Duing whe
 Sip ince Spring. LPC - keeep up the good work! Frnio - you keep it up, tos. Till noxt, 73

## LARTK 'S GOING TO RB-ENLIST IN TFF U.Se CeG.

 Rell, I have temporarily resciniad my last lise and will rojoin tho Living NRC again. As a hort ra-intro for the nowor members 1 an almost 28 , married to a wonderiul lady by the name of Gayle a wo have our newest addition to tho household, Loyd, ago almost four monthe. currently woris for Uncle Sam's "canoe club." Come Deceanber I'll be reonlieting for amother ix years and posaible new duty stutions next yeur include New Orleans, Shidoey Island, Wash outh Weymouth, Mass. (Hollo, ERC, nelghbor) or atay hore at Memphis. I would like to wel come SIDNE E. MAM raito nows: Whic has launchoda total raico concopt, going for more information \& intertain e $X$, CBS $N X$, drama ani features together with a tightly formatad midjlo-of-the-roed conteppor$X$, CBS NX, drama and foatures togetnor with a tightly formated midio-oi-tne-roma contemp They will hold down the $6: 32-10 a m$ time freme with features like Julio Childish, a traveliling inapiration troupe, Nixon and Nixon, attornege at law, plus a whole bunch of other foolishness. You sleepy-oyed SES DXers hear something strango on 560 , now that's probebly HHBQ . Hot wuch $D X$ dons as of lata but thinge are looking up. I still haven't used that $46-c a l i b n$ ballet on the transformor jet but --... Well, to all, gotta run and feed the baby and sss DX which is a he-ck of a trick; bottle and baby in one hand/lap, log/pen/tape dack/frequency knob/
 heckere in the NRC Contest this year ( $\mathrm{F}_{\mathrm{a}}$ will overcome MIIE HEPPE). C U in 7 .

ALBERT S. LAELL - Box $26 \frac{\text { ALBERT'S }}{}$-SAN $\frac{\text { HAVING TROUBIE FINDING TIME_TO DX }}{714-484-0604}$ or 714-566-0092 ................. Fill it sure has beon a long time since I last sent in a Mase. I'll bat a lot of you thought I'd given up DXing! No, not oxactly; I just haven't had the time with
 actually turned on the receiver. in quite some time. I hope to got back to DXing soon ince itls been a long time sinca my last Muse I'll give a ro-intro: IrIr almost 32 years oll ton yoars, no chilitron. My ma in DX interest is BCB; howover, I have ione some SW, FM, TV \& IN DXing. In adilition to NRC, I belong to: IRCA, WTFDA, LICA, SCADS, SDDXC, \& subicrioe to the ANARC Nowslotter. I was up until Just recont ly the editor of IRCAls Advieor column. I resignei due to a lack of tire for the column. The column's new editor is Tin O'Hare ani ho's changei the name to "Swap \& Shop". DXere are always welcome to stop by as long as they ot me know first. Prepaid calls are welcome at the apove phone numbors between \& \& 9:3jper and also on wi's ary time. Times are PLT. If you got my anowering macnine be sure to leave a mossugs. Fell, that will be it for tnis Muse, 73 de ASL

HEY YOU WIERE THE WEST WIND BLOWS - YOUR SPECLAL ISSUE IS CONING - DBADLIRE FOR MUSINGS KIL PE NONDAY, NDVEMBER 19 - NEXT MONDAY! LET'S MAF IT A WEST COAST BIGSIE! THAT SAYT YIPPEE!

GENS IMARTIN - 3303 Sast Evans Avamie - Denvor, Colorado - 80210 South Kores, 10/20/79 some thoughts of mine on the prospects. The onding of DST the last Sundey of October will delay by one hour, the early s/ons of stations which may have been giving trouble with 1566. HiDA delivers the strongest signal 1 rom NS Asia since the demise of VOA Okinawe. It rolled into our condominium on keni last December vie the little TRF with its phoious commercial religion progrem mach stronger than axy of the JO's. I might say it was even stronger than the mighty KNBR because it was! It also beats out tae JO's as hoari in Denver and can be found many times when the most potont JOls cannot be hoard at all. In chocking my notebook recent weoks, I find that I have heard it with the A-Index as high as 15, 18, \& 26 . On Oct. 4 , I noted no plipe on the hour at 11:00ai. The earliest time I have found its carrier was 10:11 on $8 / 38$, ani 10:03 on Oct. 11. And it seams to take $40-60$ minutes later before you start hearing audio. The fade-in time might be an hour earlier in ano ther fow woeks DU signal appeared on 1566 a gooi many Summer morninge in the pro-dewn period but has never given me any readable audio. It might be Suva or Australia. So to the Eastern Internacan mull XSRF to good advantage all the way from Goorgia to loaine, and some morning you may find a good signal.

## WAYNE'S ROLLING

WATNE HEINEN - 427 Bast Caramillo Streat - Colorado Springs, Coloraio
 now hoari with most nes's full of little now. Thanice to the LOU BURGLER's for a GREAT Convention. It was good to see all in St. Louis - I may oven make it to LDS ANGLIES, Veries: $\mathrm{V} / \mathrm{PP} / \mathrm{C}:$ KCSR-610, ERGI-1430, KLCL-1470, KDJI-1270. V/1- KHAC-1110, KMCL-1240, EZEX-1100, EOWB-1290, KJLA-1190. V/q-CJCA-930, which was $\$ 800$. Nice to ses BGB GRKENLEE on a racen trip to Boulder and NOM MAGUIRE while seeing balloons with the JERRY STARR's in Albe-Q-O. 111 in all, lote of travel in Sopt. \& Oct. I hope to see some positive results from ry CPC get 29801. CPC Season rolling. See you all in the Living NBC. Later.

## JIM'S FINDING SONE INWKRESTING DX

JWEsS E. CRITCHETT - 1635 Walbridge Street - Red Bluff, California - 96080 10/22/79 ************** My last report to you was dated $10 / 1$, so I had better report my DX loft the air. Their Night Club $\Delta N$ show is no more. CFCP \& KUHL dominate 1440. Thursia Oct. 4 3:57 the Corvallis, Oregon station IDDed as KiJo-KFLY on 1240. GUY KUDLPAYER, NRC member from Bagone writes that the call was changed in the early part of July. KEJO is listed. In his weekcly TV paper. CFLY is the IM station, per Jones Log. I finally hoard one of ny nearer unheards on Fri. Oct. 5 10:01 on 1520 as kaPG, Hollister, IDed, then resumed Spanish progrmaning. Number 654 for Hed Bluff was the call change for KCYX-1260, ex-DNCM in MaMinnville, Ore. e 10:29, Oct. 13. KYAC-1250 is off occesionally as at 7:30 ThaC-1250 said mill morning long" Sun. 10/21 6:18, KYAC IDed, but Mon io/22 YTMS KYAC-1250 said mall morning long". Sun. 10/21 6:18, KYAC IDed, but Mon. 10/22 XTMS was alone on 1250 until 5, whon someone s/on; probably WREN, Topeka. On 1240, KbMY has dropped the Larry Eing Show. Thay're hard to Identify without the King show, but IDed Sun. 10/21
$6: 59$, SPU. On 600 Mon. $10 / \mathfrak{Z}$ 4, only CJOR IDed; no KOGO; SPU. I hope that sane of the Sore holpa some other DXers. Best wiehes P.S. - A Eurska NBC member called KEKA-790 who said their target date is Dec. 1 , so watch for ETs, West Coasters.

JERTY STARR - c/O WSRD ANOTHER NRC-ER VISITS ALBUQUERQUE
******** Grestings. Time for the anmail start-of-the-season Muse from Yablani. I just returned from the socond of two onjoyable vacations, our annual trip to Albuquerque for the National Hot Air Ballooning Meet. The first was to St. Louis for more of the eame, mimus the balloon. Seriously, I have to add hy praises to LOU BUKHLKR and the gang for an EXCELLENT Convention! Fill the last 22 caese of Barbarian Club be suctioned next year? Fhilst in Albq we onjoyed the company of WAYNE HEINBN and Leslie who came down from Colorado Springe for a few ays a Some notes on Albuquerque radio: EDAZ-730 has dropped SS in favor of rallgion programitis KUNX-1520 is back on the air, having droppes ss in favor of a disco-pop format, leaving KABP 1350 as the only SS in town. EZIA- 1580 has tha 10 CW on, KKJY-1190 (ox-KPAR) now pees these
 country music; their riobile unit, wnien is a miniature coveres wagon, was at the Bailoon Fiesta with "KDQ" on it, they ovilontly drop the seconi $Q$ for their jogo. KRZY is still on $1450 \mathrm{w} / \mathrm{c} / \mathrm{w}$, don't expect the switch to 129 ) in the near future. I notei that KDQ२ (ex-KDEF) KNWS/KUFF etc.) got tired of changing the big black plastic letters on their ouiliding, it non say* Just "Kn. I discovered the reason for KZIAls excellent eignal, their XR is located in the midile of the lawn of a large minicipal park : ith a builit-in eprinicler syater that operates daily; they've got to bave the only wat ground syaters in town. Fanil note in respone to many inquiries, tnere VILLL oe a YAD in 1980, detalle wall appear enortly in DX NEWS.

EVEE YHODY IN EHITISH COLLNE LA, NEVADA, CALIFOHNLA; OHEDN, \& hASHINGTON, GET YOUR wUSINGS IN FOR THE GIG ( $\rightarrow$ PPYFULLY) VEST CNAST SPPCIAL EDITION OF DX NEWS. DEADLINE IS NEXT NONDAY 12/29!
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| 1050 | KY\% |
| 1110 | wnar |
| 1150 | *DEL |
| 1210 | tcau |

1210 KDEL
1200 " 24 hours 5:30-1:30 a.n., 10,002\%. 500 watts, daytimer $6: 30 \mathrm{zil1}$ 1:00 " 24 hours" (See 1490 below) 500 watts, daytimer 250 wattr, daytimer 6 a.m, to midnight, 250 watt 7:00 a.m. to $1: 30$ a.rim 7:00 til1 12:30 a.m., 1,000 wat ts 7:00 till 1:00 an AN-6 or NSP.
NSP
Now 『22D \& almost MSP. off vea only! No change this fur. 24 hours ; off ime 24 hou 24 ho
6 NS

6 aum. to midnight Now WJBR, 1,000 watt Now 5,005 wat ts.
 NSP NSP Then a 1,000 watt daytimer 6:30 ( $6: 55$ ) till $1: 00$ a.ll.
7 a.m. till milinight, in Morrieville, Pa . 4:40 a.x. $(7: 00)-12: 00$. $A N-5$, of $I$ SM \& MM Home of Daytimer Now 50 bow. daytimer. Nok 5,000 watts Now TVIQ \& WSP
WPWA 6:00 aom. till midnight

- KCAM-1310, now is off its AN shad - this was written and submitted by DAVE SCHMIDT back
on March 16 th, whon this infocmation was curront. NRC ETS KeNP has sent in a bunch of contrioution for this column, and wo 12 sow you another ne of thom noxt woek. We could uee more such from you leds out there - pleasel The info for the 1951 skois above ceme from ALLEV LUCKEY's "Stamerd Butes \& Datall book from Jamary, 1951

WRRIS SORETSEN - BOX 764 THE ONLY PIRATES AREFIT IN PITTSBURGH
fect, I haven't laseod in a long time, mainly because I've had nothing to report.
 a teacher and this year I am teaching a regular Grade 4 clasp plus a course in Grade O Soeisi Studies. I also coach the Junior High \& High Scnool track and eress-country teras and mite involved in commanity affairs. Dy main reseon, however, for not doing more BCB DXing is the horrendous TVI in the apartment building where I live. It was bed enowgh when wo juit had the CRC notwork here but now there is a local pirato on chemel 4 Wheh plape tapes of Toronto-Buffio area atations until 3 or $4 \mathrm{~A}, \mathrm{~m} .100 \mathrm{al}$ time nightly. May of the apartixent residente nert are shift workers and watch it in the weo small houss", coneequently ruining win DX. I might also mention that I am anditing a night course in 8panish. his may eventually holp me out with La loggings if I over again in a location whore such things are possible. 73. (Why not alert tho CRTC to your pirato, Morriel -IRC)

anyone for anothor susing from the top of Puorto Plata. I mast sey that, if anyone wante to come to my hous a, it is really not easy to do. The road very bad with
 would thinic after five years they would have solved this problean, but no way. Burricane David didn't do mach more to the power probler than what we had bofore. We are going to buy 4 small fowor plant, so we cen hava power at night to watch TV. I miet say that we get eever. countrien on TV at night daily which kiami is the farther on Ch. 7-12-23-45-51. Cuba teices up Ch. 2-4-5. As of nct. 6, a now station went on the air, GIFV- 1300 Padio Chimahuita, in Chimuhuita. Their atudios and antenna are on the western yart of tee town \& their power is 50 m . I hat a nard time finiting this station but I was really happy whon I did. The owne: of the station gave xo a nice tour of his station. This station 1000 not got cut very ppos bcause of HIKO on the sume 1 royuchcy. NEH on


COIE ON, PACIFIC VI बEERS - GET AT IT RIGRT NO SO WE'LL GET YOUR MEING BY NEXT MONDAY!
(6)

BILL HARDY - 2301 Pacific Averue - Aberdean, Washington - $98520 \quad 10 / 25 / 79$ seas to be gonerally good the last fow days, \& as a bomus, my electrical QRM of the past five monthe mysteriouely vanishad Monday night 10/22. Hailolujah! Unfortunately, the NFC contest was just about finished by then, the nots owrecking frequencies below 950 for all but the last night thereof inchiding both Macts. So Nancy's contest entry \& mine are each a mere 20 states apiece, de woid of such "easy" sturf as Tonn., Ohio, Ga, \& Ky. Nancy had to uee ESTP-1500 rather than TCCO-830 as the Minn. ontry, \& I missed the KSTP ID so no Minn. for me this time. (For rovenge, I logged Wis, With Nancy asleep, hi). The MaN DX session $10 / 22$ (complete with power-line QRM) produced no new joggings. However, Wei, 10/2/ we got up sarly to see if VOA-1180 Fla. Would be in es /on of $7: 28$ em EDT. Sure onough, "Yankes Doodlo" wafted through WHMM's mx, nice VOA ID 7:30 \& into 85 show. No XR location ippines being the last to abandon the practice. I remember in 1960 when VOA SVI XRs all hai ippines being the last to abandon the practics. I remomber in 1960 whon VoA sill Xhe all 7:57eni I settied on 1260 where unn KPOF s/on, then Bax, much-wanted ErBI-1260 s/on w/ID, very little KYA/XCYX, CFRN mulled easily. IGEI faded o/u all the rest, excellont-to-nil signalo, very few call letter mentions except in ad e 8:400ur ; Mutual NX e 8:30-8:33 $\frac{1}{2}$. WEI does something unique after kintual NX, \& I recallai this from my August vacation there: fust before IWEI WX, they use ten seconde of the Larry Xing Show thome! As a daytimer, of course, INEI doesn't carry his show. Many ade for Noiser businesees, \& for thos owondering Weiser riymen with rireeser. I got enough for reports to voi a krei. If thay verie, it li be $\$ 6$ \& $t 7$; VOA would be state $\$ 5$ veried! Looks like Nancy \& I will renew for three y ears before due go up, sinoe wo know we'll want to be NRC members indofinitoly, aryway. And if that ien't confidence in the "Living NRC", then nothing $18!73$ and good DX. CTOSING IN ON VERIS $\$ 200$
JIM Warrace - 3786 Quance Drive - Apartment E - Columbua, Ohio - 43228 10/26/79
 the TV's in ry apartment building are driving me nuts. Nomotimes they are evon on at 6 ann. However, I have added a fow new stations lately. $\mathrm{V}_{\mathrm{y}}$ log is at 978 stations now, so I thinic I'11 meet my gole of 1,000 by the end of the jear. Wy next verie will be $\$ 200$, so I may reach that goal in the next woek or two. Murricane David holped with the logginge right af ter the Convention. I logeed WFIV-1080, Kissiminee, Fla., WAPK-690, Jacksonville; WKSP-109J \& EDED-1310, Kingetree, S.C.; \& WLSC-1570, Loris, S.C. The only one that hasn't verified yet is WFIV, so I probably should send a $1 / \mathrm{up}$. I also received KG70-540 \& WGBS-210, but I had verifiod both of them last jear. From mid-Sopt. to mid-Oct. I didn't have much tirie for $D \mathrm{DX}$, becmee yob had me traveling around the state to 11 seminars. I did get the chance to visit several stations \& see othors from the road. Stations I visited were: WYSU ( M ), Youngs town; WCIY, Cincinnati; WNN, kaneliold; ILle, Cambridge; WHiN, Licron; WSPD, from FOUB is a possibility. ItII working on that mow. Stations I sow froll tha roai wer WLIWIs XR in Mason; WGLX, Galion; WCHI \& WBEX, CALllicothe; WNRE, Circloville ; WDBN (MM) WoAina; WGTE (MI), Toledo; FATH, Athen ; WLGN, LOgan, \& WHOX, Lancastar. One programing note: WBNS -1460 is now playing a lot of oldies. Good DX to all \& hooray for Capt. Spalding.

## ADDS A NIF COUNTEY - TENTATIVELY

ERNEST R. COOPSR - 5 Anthory Streat - Provincotown, Mass. - O2657 617-487-9337 10/29/79 ****.........** Verios in from WRXV $-1530 \nabla / 1$, \& $V / P P / \mathrm{C}$ from WJZA-160J, from 16 months ago. Back to the DX track: 10/16- Unn WLOO $1: 16-1: 18 ;$ \& 8 ns. Sudieniy, $8 T O C-1290$ is gone, \& its place on the dial has been taken Gy TIRX, Fla, w/Larty King. 10/17-Ano ther Cuban Mimute Man appaared today - on 1200 . On 1590, um WETT's pattern must be wryi thay wore actually topping loui WCOF hore a 2:53am. Larry Eing montioned todeg that Whit in Savannah Ga. will join his notwark. That's 1290 , \&
ex-rroc. $10 / 19$ - Super-mystory station on 1425 , unll language, unid station, with Arab-stylo chanting. Tnis is not a Europeen channel, and cortainly is not the fare of Greenlanil on this chanting. Tnis is not a European channel, and certainly is not the fare of Greenlanil on this
frequency! So, who is it? Otherta's were in, though, like on 1422,1521 . $10 / 20$ - Tentativeiv I logged a new country this Ad on 1062 kc/s., Dermark, 1:05-1:31, \& more on 1425 tetay. LK's show sneake in on 1240 , I think $1 t^{\prime} s$ WVOS, Liberty, N.Y. SM $20 / 21-1$ spent most of my two-hour DX sesasion today trying to ID an TFC w/EFL mx on 1240, riding atop mach of the time, but hard to ID, sounde like CKLD or CKLi. STAN NORss says it is CIRB, relay for CKFE
 Dancer" - 2:24, seamed too loui to be Peru. Then, a log on FCZY-15JJ, ex-WDEE, another BFL statior, which seomed to hawe on around 3am, still maintainine that milinicht-to 3 SP of ol TEEE. 1J/23- The Colombian on 1220 wes DDei this morning as HJFB, Santa karta, L.V. de Tur-
 in, $t$ a report to my lowest-over irequancied catch; tentative to Beromuenater, Switzorlani, $1: 52-2: 13$ fadoeway. I addad another prize railo naico to my amall but growing 1 is $t$ toiay as
 but 12404 : too strong and too mary to 1solate this one. Sss DX brought unns FNAR-1110, "F.



ERIC FADER - $23-35$ Bell BADER IS FADING AFAY
all, I've got hí guys. Just a fow words from Bayside's laset active BCB DXer. Firet of VFIL, plus a handful of others. Just drop me a line \& I'll dump some on you. My corresponionta have already recoivad all theoe \& I cant $t$ seam to get rid of the duplicetes. (Is anyone having the same problem with bumper atickers, hir) On another matter, I've decided to take a "leave of absence" from the NRC. My BCB activity hasn't been such the last couple of years, and with school \& other coancitriente floating around I seliom have time own to read the bulletin. Taanics to all of you wno've made it fun the pest five years. (Yipeo thick and agan; until tnen, 73 s \& nothin' but the dest - Eric. ( $\mathrm{Na}^{\prime} 11$ miss jou, 2 ad - ERC)


We hastan to point out that EVEEYBODY may sond a vusing for IVERY issue - we are eerely not aleo consiler seniing in your tips to Domeetic DX Digest and Interrmitionul DX Digest as well? And we hope when you seni in your contributione for your special issue that you will try to dovolop the habit of doing it regularly. The more we got frox you out there, of course the better will be your DX NBWS! So, please, members - join the LIVIM NATIONAL RAII O CLUB now - and forever more - MMEN! -ERC

* NOTE: Correction of datee for NEF ENGLAND's iesue


## Loosening the leash

 on radio broadcasting|  |
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 obtaining and holding a valuable il
FCCst thin
sible commitment to the public titespon The trouble with this approech was tha inevitably it entangled the FFC In in
sorts of programming deckionan. What
was "fair? What responses were "nde. quate"' What issues
sial" or "important"?

## The situation is wholly differeat to- day. The FCC has Ilcensed $4,548 \mathrm{AM}$ stan tions and 4,105 FM stationa there are 118 all-news stations. In principel mate 118 ali-news stations. In principel mar kets (those with eight or more stationa) more than 75 percent of ore more than devote more than the of the tirred 6 sper cent of air time to news and public as- <br> Minorites once were neglected. To day the commission finds 116 radio sta day the commission finds 416 radio sta tions in 239 markets that aim specifical ly at black isteners In 173 . Iy at black listeners, II 173 mapriestas 27 stations provide regularly sched 



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