Volume 7, Number 4 March/April, 1968

VHF-UHF DIGEST

Monthly publication of the WORLDWIDE TV-FM DX ASSOCIATION. Published at Milwaukee, Wisconsin the last week of each month. Address allcorrespondence and make checks payable to the publisher at headquarters.

Dues: $3.50-US funds or equivalent, worldwide; SAMPLES: 30¢ or 2 IRCs.

RENEWALS: this is the last issue that will be sent to Odis Woodward, Jr.; Adelard Beaupre; John Osborne. We hope you will stay with us and send your dues for another year, or 2 years for $7.00.

HQ-QTH:

Worldwide TV-FM DX Association
Box 5001
Milwaukee, Wis. 53204, USA

COMING next month (due 1 May):

First article, "How to DX on TV"

Sunspot counts for the last year every day, and predictions.

I received photographs from several people this month, I am happy to report. Some were not usable however due to their small size and/or being badly blurred or not clear enuff to reproduce well by our mimeograph process. Some may be usable later by another process such as offset or photocopy, but it seems doubtful at this time. Several manufacturers have recently introduced new photocopy machines in the $30-50 price bracket, which produce copies for 9 or 10¢ each. Two of these manufacturers, (Kodak and Photosol), claim their machines will copy photographs, but I have not seen either machine locally. (The Photosol is available from Lafayette Radio.) WTFDXA is still paying off a $100 mimeograph machine so we are not in a position to buy a photocopy machine at this time. And I would not put the money down without seeing how it produces photocopies of photographs anyhow.

The new issues of CQ and "Radio-Electronics" should be on the newsstands soon with our advertisements in them. Probably many copies of this DIGEST will be sent out as samples to people answering those ads.

Morrie Goldman has made a number of good suggestions for improving the DIGEST, and so have other people of course. If cost were no object there would be no hesitation in carrying out most of these, but we are a non-profit organization and that puts limits on what we can attempt this first year. We have been averaging 7-8 new members a month so far, and I expect we shall do even better during the Summer skip season, and when our ads in CQ, RE and "Electron" first appear. Lately, inquiries from Europe have been coming in as a result of our 2 or 3 line ad in WRTVH. Next Winter, I hope to have a larger paid ad in WRTVH.

Supplement 1 — Roger Bunney.

METEOR SHOWER RECEPTION

The passage of a meteor through the E layer of the Ionosphere leaves an Ionized trail, often of sufficient density to enable an incident signal from Earth to be reflected back, its reflected strength and duration directly proportional to the electron density of the meteor trail in question. Such a trail having an electron density of 10^{14} electrons/metre will allow a strong reflection back to Earth, from an average height of 60-70 miles.

The times and directions of many meteors is entirely random, there being relatively constant meteor activity throughout the 24 hours, although there is greater activity over the early morning period. Many of these meteors are not capable of causing sufficient ionization for effective signal reflection, indeed the majority of these meteors consist of material no larger than grains of sand.

There are visible in the Northern Hemisphere, however, the larger meteor showers, and their names and approximate times of arrival are as follows-

QUANRANTIDS	early January.
LYRIDS	mid April
MAY AQUARIDS	early May
CETIDS	mid May
DELTA AQUARIDS	end July
PERSEIDS	mid August
GIACOBINIDS	early October
ORIONIDS	mid/late October
LEONIDS	mid/late November
GEMINIDS	early/mid December
URSIDS	mid December
errata TAURIDS	late Oct./early Nov.

The TV frequencies mainly affected lie in Band I, and as a general rule the higher the frequency the less favourable is the incident signal reflected. No reports of TV reception have been seen higher than Band III.

Distances covered by meteor reflection (MS) are approx. 600-1100 miles, similar to short and medium hop sporadic E propagation.

The characteristic signal via meteor reflection is of a short burst, or rapid fluctuation in received signal strength over several seconds, although it should be noted that during the larger showers, signals can be sustained for longer periods than the random shower as stated above.

During the periods of higher activity, transmissions at varying distances within the ranges as stated above may be received simultaneously. At such periods there is a possibility of a site receiving the original transmitted signal over several paths, causing smearing, mutiple images, and phase reversal.

correction to line 5- 'an electron density of 10^{14} electrons/metre'

NB The exact times of the predicted meteor showers, together with the dates and burst/hour may be seen in the VHF/UHF Digest.

Ambrose Maxim
23 Lambert St.
Winthrop, Me.04364

Monthly report of the activities of ANARC

The voting on whether to have a "Man of the Year" or not was 10 to 2 with i abstaining. The man chosen must be an outstanding member of the hobby. This is NOT a popularity contest, but more of an acievement award. The recipient of the award must be like Bill Eddings, LeRoy Waite, Ernie Cooper, John Callarman, Admiral Nelson, or Curt Webber. Presumably a committee of 3 will accept nominations, and devise the standards and procedures under which nominations will be made.The committee will then examine the candidates and pick the one they feel is most deserving, based on his contributions to DXing. The winner is to be announced at the ANARC convention. (He need not be in attendance.) If you would like to nominate someone, write:Man of the Year Committee
311 West 14th St.
Riviera Beach,Fla.33404

Applause for a job well done to Margaret Hinkson, (president, secretary, and treasurer of WIDXA). Best of Irish luck to Cesar Objio, BCB editor.

The 1968 ANARC Convention, with Ernest J. Wesolowski as host, is tentatively set for August 16-18 at the Commodore Motor Inn located 6 blocks from the center of Omaha, Nebraska, at 24th & Dodge Streets.

There might be a tour of SAC headquarters, but this isn't definite as yet.

If you would like to attend, write me & I'll pass the word along.
--Ambrose Maxim

FRCE Report

The current issue of the FRCE newsletter puzzles me. The federal government proposal to unite all DX clubs under one leader has apparently been revised greatly, in compliance with my thoughts to a great degree. (See my FRCE editorial in the February "VHF-UHF DIGEST.")The original proposal as presented TO me was entirely different from that stated in the latest FRCE newsletter. I don't know if this is an honest effort to change, or if it is a re-worded but still essentially the same power-play, as some people have referred to it.

Until the situation is thoroughly clear, I am participating in FRCE activities, and have not sent in my dues.

Ferdinand S. Dombrowski Jr.

WDXC CONTESTS

A letter from our ANARC rep has been received entitled "Suggestion" but I'm not sure who's suggesting to whom. I've heard nothing from Lorne Jennings the last month about the contests so I presume the situation is as it was before---the contests are temporarily postponed until the winners of past contests can be found and rewarded.. The big problem came about because the former WMRC/WTFDXA contest editor did not fulfill his obligation to the contests or to the 2 clubs involved, namely ours and the CIDX Club. Lorne Jennings of CIDX agreed to handle the contest chores for his club, but WTFDXA has no editor at all now; FM and TV contests were planned for May and June respectively, but until someone volunteers as an editor for WTFDXA, it appears there will be no contests. Prizes included certificates, subscriptions to the two club's bulletins, an atlas worth $8 or 10. So it appears now that the prizes will go unclaimed for lack of a volunteer to handle contests.

FCC NEWS AND DATA
MARCH, 1968
TV DX (PAGE 1)

GARY OLSON
703 JERSEY AVE. APT.B-11
BLOOMINGTON, ILL.61701

HI! And welcome to you from the "FCC News and Data" corner of the Worldwide TV-FM-DX Association.

This column will be provided on a monthly basis. The information published here will be compiled from Broadcasting and other publications; it is designed to keep you as up-to-date as possible on information regarding stations on the air, new allocations, changes in call letters, etc. It is hoped that individual club members will contribute their information so that we can be as timely as possible. Some information such as stations testing, target dates, and stations leaving the air are not always published -- thereby leaving it up to our network of members to assist us in disseminating this information.

The format of the column will be as follows: there will be four basic departments -- Stations Operating, FCC Completed Action, Action Applied For Or Requested, and Tidbits.

Stations Operating will include information on the number of stations on the air, new stations noted on the air, new target dates, and miscellaneous changes.

FCC Completed Action will provide information about new grants, call letter changes, issuance of new call letters, and other changes in operating stations (such as ERP, tower height, channel, or location of transmitter changes).

Action Applied For Or Requested will encompass information regarding applications for new stations, requests to change operating facilities, and requests for changes in call letters or new call letters.

Tidbits will essentially pick up all the loose ends and add any miscellaneous information which might be considered exceptionally interesting to TV DXers.

Now for this month's report:

STATIONS OPERATING (AS OF 1/29/68)

UHF ETV 75
VHF ETV 71
UHF COM 144
VHF COM 501

TOTAL AUTHORIZED STATIONS ON AIR 791

New stations reported on the air:
WDCO (TV), ch. 15, Cochran, Ga., 363 kw ERP vis., (Aired reportedly Jan. 1)

New target dates reported;
WBLG-TV, ch. 62, Lexington, Ky., 446 kw./93 kw. (expected to take the air June 2)

Misc. changes reported:
WCCB-TV, ch. 18, Charlotte, N.C., (now a Primary ABC affiliate)

FCC COMPLETED ACTION

New grants:
Chicago, Ill., ch. 38 (WCFL-TV) 836kw/200kw -- grant upheld
Oneonta, N.Y., ch. 15 (Susquehanna Broadcasting) 10.7 kw vis.
Rochester, N.Y., ch. 31 (Philip Hahn Jr.) 294kw/29.4 kw.
Buffalo, N.Y., ch. 29 (Ultravision Broadcasting) 253kw vis.
Houston, Tex., ch. 26, (Crest Broadcasting)

Call Letter Changes:
WFLD (TV), Ch. 32, Chicago, granted WFLD-TV

-more-

New Call Letters Issued:
WBLG-TV, ch. 62, Lexington, Ky. (WBLG-TV Inc.)
WWU-TV, ch. 65, Battle Creek, Mich. (BCU TV, Battle Creek)
WRIV-TV, ch. 55, Riverhead, N.Y., (WRIV-TV Inc.)
WCMN-TV, ch. 54, Arecibo, P.R. (Carribean Broadcasting Co.)
WTBO-TV, ch. 52, Cumberland, Md. (Mountain Television Inc.)

Other Changes Allowed:
ch. 44 (assigned to Winona, Minnesota)
KWWL-TV, ch. 7, Waterloo, Iowa (granted CP for ERP change to 182 kw/36.3 kw., antenna 2,010 feet)
ch. 20 (added to Ft. Myers, Florida)
WVTV, ch. 18, Milwaukee, Wisc. (granted CP to change ERP to 1,100 kw/110 kw.)

ACTION APPLIED FOR OR REQUESTED

Applications For New Stations:
Anderson, Ind., ch. 67, 4.864 kw/962 w. (2588 Newport Corp)
*Hastings, Neb., ch. 29, 272kw/54.4 kw (Nebraska ETV Com.)
Victoria, Texas, ch. 25, 5.38 kw/1.02 kw (J.J. Tibiletti)
Terre Haute, Ind., ch. 66, 316 kw/31.6 kw (Broadcasting Affiliates Corporation)

Requests to Change Operating Facilities:
WURD (TV), ch. 40, Lawrence, Ind., seeks to move station to Indianapolis (not on air yet)

Requests for Call Letters or Change in Call Letters:
Baltimore, Md. (Chesapeake Eng. Placement) Requests WBFF-TV
Columbus, Ga., (Gala Broadcasting) Requests WYEA-TV
Kalispell, Mont., (KMSO Inc..) Requests KCFW-TV
Macon, Ga., (Rovan Television) Requests WMCN-TV
Atlanta, Ga., WAII-TV, cha. 11, Requests WQXI-TV
Lubbock, Texas, KJJJ-TV, Requests KSEL-TV

In the above listing and in future listings, an asterisk (*) before a city or call letter listing will indicate an ETV station. Pertaining to station power, visual power will be listed first followed by the audio power if known -- for example 35 kw./3.5 kw. Antenna heights listed refer to height above ground (not height above average terrain).

That's the report for this month. Yours truly would appreciate your comments and suggestions (especially in regard to whether the above information on a monthly basis is too detailed or not detailed enough). Of course, your contribution of any information for this column is requested.

73's
G.A.O.

NOTE:

Can any of our Canadian members provide Gary with news from the DOT about Canadian new stations, grants, changes and applocations? It would be very much appreciated.

NOTE:

We are always in need of more photographs. If you have 3x5" good recent photos, or negatives from which we can make them, please send them along to headquarters. Thank you.

FCC NEWS and Data

GARY OLSON
703 JERSEY AVE., APT. B-11
BLOOMINGTON, ILL., 61701
APRIL, 1968 (TV DX)

STATIONS OPERATING (AS OF 2/26/68)

UHF ETV 75
UHF COM 145
VHF ETV 71
VHF COM 501

TOTAL AUTHORIZED STATIONS ON AIR 792

New Target Dates reported:
ch. 34, Fon Du Lac, Wis., KFIZ-TV, 700 kw., target Aug. 1st
ch. 41, Patterson, N.J., WXTV (TV), target date July 1st
*ch. 43, Texasville, Ala., (ALA. ETV Com.) WGIQ (TV) - June 1st

FCC COMPLETED ACTION

New grants:
Seattle, Wash., ch. 22 (Kings Garden Inc.) recommended for grant in FCC initial decision

Call Letter Changes:
San Bernardino, Calif., KITR-TV changed to KHOF-TV (ch. 30)
Washington, D.C., WOOK-TV changed to WFAN-TV (ch. 14)
Lafayette, Ind., WFAM-TV changed to WLFI-TV (ch. 18)
San Antonio, Tex., KONO-TV changed to KFLI-TV (ch. 12)

New Call Letters Issued:
Palm Springs, Calif., (Pacific Media Corp.) granted KPLM-TV,
Rochester, N.Y., (Flower City TV) granted WAAE-TV (ch. 13)
Kalispell, Mont., (KMSO TV Corp.) granted KCFW-TV
Portland, Ore. (Gilmore Steel Co.) granted KPVC-TV (ch. 24)

Other Changes Allowed:
Palm Springs, Calif., ch. 36 (Desert Emp. TV) grant upheld
Patterson, N.J., WXTV (TV), ch. 41, granted ERP chg. 1,o20 kw.
Rosewell, N.M., KSWS-TV, ch. 8, granted ERP change to 267 kw.
Kingsport, Tenn., WKPT-TV, ch. 19, granted ERP chg. to 447 kw.
Las Vegas, Nev., KSHO-TV, ch.13, granted ERP chg. to 204 kw.
*Pullman, Wash., KWSC-TV, granted ERP change to 14.k kw.

ACTION APPLIED FOR OR REQUESTED

Applications For New Stations:
Atlanta, Ga., ch. 46 (Christian Broadcasting) 834 kw/167 kw.
Toledo, Ohio, ch. 60 (Midwestern Broadcasting) 560kw./112 kw.
*Norton, Va., ch. 47 (Blue Ridge ETV Assn.) 629.17kw/94.375 kw.
Dubuque, Ia., ch. 16 (H+B Communications) 158 kw./ 16 kw.
*Demopolis, Ala., ch. 41, (Alabama ETV Commission)

Requests for Call Letters or Change in Call Letters:
Des Moines, Ia., (Iowa Broadcasting) ch. 63, requests KWIG-TV
*Baltimore, Md., (Md. ETV Broadcasting) WETM (TV) ch. 67, requests WMPB-TV
Akron, Ohio (Cathedral of Tomorrow) requests WCOT-TV
Albany, N.Y., (Mercury Media) WEEE-TV, ch. 45, requests WOWE-TV
Rochester, Minn., (Rochester Telecasting) ch.47 requests KCTR-TV
Oneonta, N.Y., (Susquehanna Broadcasting) requests WCAF-TV

TIDBITS

WQAD-TV, ch. 8, Moline, Ill. which has been on for several years has been designated for a re-hearing on its license.

THAT'S ALL FOR THIS MONTH -- 73's

GAO

FCC-FM NEWS

MARCH
APRIL

Compiled by Dennis Smith

from Broadcasting magazine: 1 8 15 22 29 Jan. 5 12 19 26 Feb 1968.

NEW STATION AUTHORIZATIONS (New CP's):

*89.3 Moscow, Ida 10W(UnivOfIdaho)
97.5 Oxford, Miss 26.5kW 265'
*89.9 Stevens Point, Wisc 10W 75' (Wisc State Univ)
106.7 Leesburg-Eustis,Fla 40kW 231'
96.3 Eureka,Cal kW29.6H 27.9V 1580'
105.9 Wadena, Minn 50kW 250'
94.3 Salisbury, Md 3kW 150'
*91.1 Moorhead, Minn 94kW 300' (Concordia College)
95.3 Shamokin, Pa 1.75kW 380'
98.3 Stephenville, Tex 3kW 205'
102.3 Blountstown, Fla 3kW 145'
104.5 W.Palm Beach,Fla 100kW 875'
102.3 Martinsville, Ind 3kW 300'
102.3 Waynesville, Mo 1kW 480'
101.5 BatonRouge,La 33.3kW 370'
95.9 Dundee, NY 0.93kW 460'
99.3 Ahoskie, NC 3kW 300'
106.9 Clinton, Okla 100kW 285'
99.3 S.Williamsport,Pa 105W 1230'
97.3 Sioux Falls, SD 28kW 1860'
Springfield, Mo
101.3 Cathedral City,Cal 3kW -600'
*91.1 Atlanta,Ga 10W(GaInstOfTechny
*89.5 Mansfield,Pa 0.010kW -320.4' (Mansfield State College)
*88.5 Wilkes-Barre, Pa 10W 180' (King's College)
94.3 Lewisburg, Tenn 3kW 115'
*89.3 LosAltos,Cal 10W 35'(Creative Ctr.ofL.A.&FinewoodPrivateSch)
*90.5 Coral Gables, Fla 10W 116' (Univ of Miami)
92.7 Taylorville, Ill 3kW 155'
100.7 CapeGirardeau,Mo 28.6kW 170'
95.3 Corinth, Miss 3kW
105.1 Salem, Ore 23.26kW 380'
107.1 Dodgeville, Wisc 3kW 300'
96.1 Maricao, PR 10kW 1950'

CALL LETTERS FOR NEW STATIONS(CPs):

WARI-FM Abbeville, Ala.
WMDR Moline, Ill.
WJER-FM Dover, Ohio
WPGM-FM 96.7 Danville, Pa.
KWAT-FM 96.9 Watertown, SD
KAWB McKinney, Tex.
WBNB-FM CharlotteAmalie,VI
KWIQ-FM 100.3 Moses Lake, Wash.
*KGLT Bozeman,Mont(MtStU)
WMST-FM 105.5 Mt. Sterling, Ky.
WNHV-FM 95.3 WhiteRiverJct,Wisc
*WSUS 89.9 Stevens Point, Wisc. (Wisc State Univ)
WESP CharlotteAmalie,VI
KJRL Liberal, Kans.
WMBC-FM Columbus, Miss.
*KHRU Clayton,Mo(SchDistCl)
WFLR-FM 95.9 Dundee, NY
WFEM Ellwood City, Pa
WIKI-FM Chester, Va.
KFMV Magnolia, Ark.
WHFD Archbold, Ohio
WGLN Sylvania, Ohio

LICENSES GRANTED FOR NEW STATIONS (Have been on air under STA):

WVFV 103.9 Dundee, Ill.
WPGU 107.1 Urbana, Ill.
WDUZ-FM 98.3 Green Bay, Wisc.
WWLA 93.3 La Crosse, Wisc.
WDMW 92.1 Menomonie, Wisc.
WRDB-FM 104.9 Reedsburg, Wisc.
WRVM 102.7 Suring, Wisc.
KAMB 101.5 Merced, Calif.
KMRC-FM 96.7 Morgan City, La.
KRXL 94.5 Kirksville, Mo. (rescinded earlier grant)
KBGH-FM 103.7?Memphis, Tex.
WAKE-FM 105.5 Valparaiso, Ind.
WRNO New Orleans, La.
WMLP-FM Milton, Pa.
WPOR-FM 101.9 Portland, Maine
WWSC-FM 95.9 Glens Falls, NY
WTPR-FM Paris, Tenn.
WFON 107.1?Fond du Lac, Wisc.
WMFI-FM Daytona Beach, Fla.
KMAQ-FM 95.3 Maquoketa, Iowa
KBUR-FM 107.3 Burlington, Iowa
KFMD 92.9 Dubuque, Iowa
KLTB 106.3 Bolivar, Mo.
WGUS-FM Augusta, Ga.
*WLTI Lowell, Mass.
WCCA McComb, Miss.
KWTO-FM Springfield, Mo.
WSEN-FM Baldwinsville, NY
KLIQ-FM Portland, Ore.
WIVE-FM Ashland, Va.
WPUV-FM Pulaski, Va.
*WNUB Northfield, Vt.

CALL LETTER CHANGES(operating & CPs):

WJWL-FM 93.5 Georgetown,DE(xWFEM)
WRCM 92.1 Jacksonville,NC(WJNCFM)
WWRW 103.3 Wisc.Rapids,WI(xWFHR-FM)
KTCR-FM 97.1 Minneapolis,MN(xKWFM)
WQTC-FM 102.3 2Rivers,WI(xWTRW-FM)
KULA 92.3 LasVegas,NV(xKVEG-FM)
WRNS 95.1?Kinston,NC(xWCRQ)
KGFM 101.5 Bakersfield,CA(xKGEE-FM)
KFIG 94.5 Fresno,CA (xKCIB)

FCC FM News: Call Letter Changes, continued

WCJW	104.1	Cleveland,OH(xWJW-FM)	KADX	105.1	Denver,CO (xKTGM)
WOVV	95.5	FtPierce,FL(xWIRA-FM)	WSTK	105.5	Woodstock,IL(xWREK)
WTLC	105.7	Indianapolis,IN(xWAIV)	KOKE-FM	95.5	Austin,TX (xKAZZ)

FACILITY CHANGE AUTHORIZATIONS (operating and CP's):

WHIY-FM	107.7	Mt. Dora, Fla raise to 100kW 400'
KUZN-FM	98.3	West Monroe, La change 590W 610'
WESC-FM		Southbridge, Mass change location & xmtr: 3kW 295'
WCHD	105.9	Detroit, Mich dual polar ant, raise to 275'
KSVP-FM	92.9	Artesia, NM change 11.8mi E of Artesia, 50kW 1090'
WSPA-FM	98.9	Spartanburg, SC install circular polar ant
WLWM	95.5	Nashville, Tenn move st-xmtr 5700 Knob Rd, 1410'
KPUL-FM	104.9	Pullman, Wash move xmtr 600' E, 1.70kW 57'
KCFA-FM	98.9	Spokane, Wash move xmtr to Mica Pk, Spokane, 31kW 2380'
WERH-FM	92.1	Hamilton, Ala install circular polar ant
KTBT	94.3	Garden Grove, Calif to 215'
*KUSC	91.5	Los Angeles, Calif raise to 17kW 155'
WOMC	104.3	Detroit, Mich change to 215'
WPRW-FM	106.7	Manassas, Va move st-xmtr location, 10kW 500'
WRVI	95.3	Winnebago, Ill change 1.1kW 260'
WHOP-FM	98.7	Hopkinsville, Ky change xmtr eqp, 30kW
WHFI	94.7	Birmingham, Mich install dual polar ant, 300'
KEYC-FM	99.1?	Mankato, Minn change 860'
WTMG	104.5	Gallatin, Tenn move xmtr, 600'
KIKK-FM	95.7	Houston, Tex move st-xmtr, 40kW 370'
WKWK-FM	97.3	Wheeling, W.Va. change to 50kW
WTMB-FM	98.9	Tomah, Wisc install dual polar ant, 660'
KMND-FM	93.3	Mesa, Ariz change to 1550'
WNGO-FM	94.7	Mayfield, Ky new xmtr eqp: 2.15kW 155'
WXUR-FM	100.3	Media, Pa new ant, delete vertical polar
WPAB-FM	93.3	Ponce, PR install dual polar ant, 14.5kW -225'
KXLY-FM	99.9	Spokane, Wash install dual polar ant, 4.6kW
WKOF	100.3	Hopkinsville, Ky new xmtr: 30kW
WHIZ-FM	102.5	Zanesville, Ohio new xmtr-ant: 20kW
WORO	92.5	Corozal, PR change xmtr: 1010'
WCRQ	101.5	Providence, RI install vertical ant
WTHB-FM		Augusta, Ga move st-xmtr, 3kW
WSHJ	99.5	Greenfield, Ind delete vertical, change to 50kW
KXL-FM	95.5	Portland, Ore new ant, 100kW 990'
*WHND	91.5	Marinette, Wisc move xmtr, 7.2kW
KUZZ-FM	107.9	Bakersfield, Calif move xmtr 25mi E to Breckenridge Mtn
KATT	102.5	Woodland, Calif move st-xmtr to 1212 Kentucky Ave
WEBH-FM	93.9	Chicaho, Ill move xmtr, 37kW 340'
*WHPK-FM		Chicago, Ill change xmtr eqp: 137.75'
WBAG-FM	93.9	Burlington-Graham, NC new xmtr, 10kW 230'
KWAT-FM		Watertown, SD change xmtr eqp, 100kW 290'
KVEZ	107.7	San Mateo, Calif new xmtr & vertical polar ant
KDNA	102.5?	St. Louis, Mo change xmtr eqp, 50kW
WQMG	97.1	Greensboro, NC move xmtr to 12mi NW of city, 560'
KSIX-FM	93.9	Corpus Christi, Tex install circular polar ant
New		Chester, Va change to 260', install dual polar ant
New	93.5	Columbia, Ky change xmtr eqp, 3kW 180'

All powers are effective radiated power (ERP), all heights in feet are height above average terrain, STA is special temporary authority, "x" refers to the former call letters. More next month: hope this info is useful.

Dennis Park Smith
321 Santa Barbara St.
Santa Barbara, California
93101 U.S.A.

WESTERN DX

For all reports west of Mississippi
Deadlines: 15th of each month

March/April
1968

There has been some DX of recent occurrence to report and a fair amount of news from different areas. This month, also, a big welcome goes out to:

RANDY MILTIER, 1760 Whitwood Ln #3, Campbell, California 95008

As a new member to the WTFDXA, here's an introduction; I'm 23, married, and have a 7-month-old daughter. I'm a draftsman at Federal Pacific Electric in nearby Santa Clara. I've been TV DXing for about 8 years off and on, this past season being my best. This past season was the first time I took pictures; I got some good ones. These pictures sure add to the hobby. So far this year nothing has been happening on the screen except on the eve of Lincoln's Birthday (Feb 21) at about 6pm PST; I had a skip going on ch. 2 & 3. I had two stations on ch. 2 with picture only, both taking turns mowing down local KTVU. As usual, the picture was great until ID time at 6:30; both stations faded out at the same time with occasional pictures appearing; I took a couple of pictures of what I thought were ID's. My film is still in the camera so won't know for a while. The unfortunate part about this was that I had to leave for school at 6:40. I went to school only to find that there was no school (Lincoln's Birthday); I dashed home hoping to get some ID's at 7:00, but when I got home the skip was gone.

DX last season includes (PST):

6/ 6/67	2130	KOOK	2	Billings, Mont.	Good w/pic
6/19/67	0700	KMID	2	Midland, Tex.	Good pic & sd
6/25/67	2150	KRTV	3	Great Falls, Mont.	Fair w/movie
7/ 9/67	1200	KTVC	6	Ensign, Kans	Excellent w/soccer game
	1205	KGNC	4	Amarillo, Tex.	Sound only
7/10/67	1940	KXLY	4	Spokane, Wash.	Sound only
7/13/67	2030	unID	3	NET (I think KLNE as they were received later)	
	2105	KOTA	3	Rapid City, S.D.	Good pic & sd
7/14/67	1830	KWGN	2	Denver, Colo.	Good pic & sd
	1831	KTVS	3	Sterling, Colo.	Fair pic & sd
7/23/67	2100	KRTV	3	Great Falls, Mont.	Fair pic & sd
8/ 4/67	0600	KCKT	2	Great Bend, Kans.	Good pic & sd
8/15/67	1900	KLNE	3	Lexington, Neb.	Fair/poor w/pic
	1901	KTVC	6	Ensign, Kans.	Fair

Plus many unID stations.

I have yet to get an ID on ch. 5.

I also have a mystery station, XLTV, ch. 4. I got an excellent picture through local KRON-TV about 8 years ago; I could never find out their location; does anybody know? (My guess might be KXLF-TV Butte, Montana. Anyone else know for sure? dps)

Another new station on here in the Bay area besides KGSC-TV ch. 36 San Jose is KBHK ch. 44 in San Francisco. KEMO-TV ch. 20 in San Francisco was supposed to air in Dec. 1967 as was KTXL ch. 40 in Sacramento. KMBY-TV ch. 46 in Monterey is supposed to be on for the fall season in '68. Until next time, best of DX.

(Glad to see another California DXer (besides me) in the WTFDXC. You seem to have done well over the years in getting TV-DX through your Bay area locals. Hope your enthusiasm continues. dps)

Next, with news from the Wisconsin area, is:

TOM MANN, 1805 E. Elmdale Court, Milwaukee, Wisconsin 53211

On March 1st, 1968, WAUK-FM 106.1 Mc/s Waukesha, Wis. s/on at 6

(Tom Mann's report, continued) AM CST and s/off at 12 midnight playing MoR (middle of the road) music instead of C&W from 4 PM - 12 midnight CST. WAUK-FM simulcasts with WAUK-1510 kc/s until local sunset.

The Midcontinental Broadcasting of Wis. will have a TV station in La Crosse, Wis. on ch. 25. Their tower will be 930 ft in height above average terrain and 606.1 ft above ground. The ERP, 130.1 kW visual, 26.02 aural. QTH is PO Box 5727, Madison, Wis. for more details. 73.

(Thanks for the detailed information from your region, Tom. dps)

And, here with his first letter to the Western DX column is FRED NORDQUIST, 411 Dart St., White Sands Missile Range, NM 88002

A word of introduction as a new member of this Association. I am 25, in the military service for 9 more months, working as an assistant test conductor for HAWK project, in my 10th year of TV-FM DXing, and am an arch foe to CATV, hi. My TV rx is Zenith portable (no UHF), Lafayette TV-FM booster (ant. mounted) and deep-fringe Allied log-periodic antenna, with CDR heavy-duty rotor. For FM rx, an Admiral FM-MPX-AM Stereo is used. Here is rundown of local conditions and Jan-Feb DX.

FM	El Paso, TX	KTSM- 99.9	40 mi.	MPX MoR mx
		KPAC- 94.7	40 mi.	c/w 100%
	Las Cruces, NM	KGRD-103.9	25 mi.	MPX MoR mx s/off 0200
		KRWG- 91.7	25 mi.	MPX variety & educ prog s/off 0200
	Alamogordo, NM	KXXI- 94.7	47 mi.	MoR mx
		KOTO-105.5	47 mi.	class. & show mx s/off 1400 Sat & Sun. s/off 0200 wkdays
	Roswell, NM	KBIM- 94.9	125 mi.	MPX MoR mx (good signal)
	Hobbs, NM	KHOB- 95.7	190 mi.	(not hrd lately)

FM DX 2/22/68

WIVK-107.7	Knoxville, TN	2103	c/w
WUOT- 91.9	"	2107	educ.-class. mx
WSEV-102.1	Sevierville, TN	2105	MoR mx

Many UNID on this Es opening into Tennessee. Skip gone by 2145.

TV	El Paso, TX	KROD- 4	40 mi.	interlaced w/CATV QRM
		KTSM- 9	40 mi.	fair signal. Some QRM from UNID sta.
		KELP-13	40 mi.	poor ghosty sig. (due to 9000' mtns.)
	Roswell, NM	KSWS- 8	125 mi.	fair signal
		KBIM-10	125 mi.	poor signal
	Odessa, TX	KOSA- 7	230 mi.	in only on EGW
	Juarez, Chih.	XEPM- 2	45 mi.	rarely over CATV QRM. OFF wkdys after 1900
		XEJ- 5	45 mi.	w/CATV QRM. ON after 1900 wkdays & ON w/soccer or bullfights, Sun. 1600
	Carlsbad, NM	KAVE- 6	130 mi.	over CATV QRM at times

TV DX 1/ 3/68

KID-3	Idaho Falls, ID	880 mi.	1600 ID	(during Quadrantids MS)
2 WBBM	Chicago, IL	1312 1250 mi.	Es	Local NX (2/18/68)
3 KTVO	Ottawa, IA	1315 1000 mi.	Es	Real Estate ads (2/18/68)

2/22/68

2 WDCN	Nashville, TN	2030 1200 mi.	Es	ETV-"Cultures & Continents"
3 WREC	Memphis, TN	2100 980 mi.	Es	ID and NX promo
4 WSM	Nashville, TN	2038 1200 mi.	Es	NBC-"Ironside" much CATV QRM
6 WATE	Knoxville, TN	2035 1330 mi.	Es	ID - "Ironside"

That's all the DX to this date. I hope that everybody will support this newly organized club with reports and DX tips...especially on how to eliminate cable-tv QRM. 73.

(Thanks for your complete area rundown and DX, Fred. Yours truly is not particularly sympathetic toward CATV operations, either. I am sure you will be happy to be a civilian again, just as I am, following finish of active duty last summer. dps)

With some news from his area of New Mexico is GLENN HAUSER

DX nil here this time, and my FM tuner's in the shop, to boot. May I relieve those of you eagerly awaiting NM lowbanders KVSF-2 Santa Fe and KENW-3 Portales. Bruce Hebenstreit, GM of KGGM-13, informs that they returned CP for KVSF-2 due 4 city-grade sigs already serving Santa Fe and market too small to program independently or Spanishly. Scuttlebut around KNME-5 is that it'll be quite a while, if ever, before KENW-3 gets on; closed circuit ITV/ETV seems to be the big thing over there now. Their absense does leave 2&3 clear in NM for a number of translators to skip out...lots of luck, hi. Until the next, 73.

(Interesting, Glenn—and there is a continuing area of the USA without powerful VHFers at the low end of the band—anyone for DXing without local signal wavetraps?? hi. dps) 303 Ash NE, Albuquerque

DENNIS SMITH--With all the introductions in progress, perhaps I should do the same. I am 28 and am a music student in college, with BA in 1963 followed by Navy service to 1967, and am now at University of Calif. Santa Barbara. I've dabbled in TV-FM DXing since early 1950's at my permanent address of 450 Poplar Ave., Wasco, Calif 93280 and still use the same TV receiver, a 1954 Zenith 19L28 21" although it is the family set and has need of repair now. The present FM set is a Fisher 1957 FM-90X mono tuner which works very well. The mast is a 46-ft iron pipe with a handle at the base beside the house for rotation. Antennas include a broadband VHF-UHF Walsco Stacked V's (not directional on low band), a Winegard VHF high-band 12-element yagi, a TACO 10-element FM yagi, and other smaller antennas. The area (San Joaquin Valley, Bakersfield-Fresno area) has always been nearly ideal for TV-DX since all locals are UHF: KLYD-17 (35mi) KERO-23 KBAK 29 (45) Bakersfield, KICU-43 (80) Visalia, KMJ-24 (85) KFRE-30 KJEO-47 (100) Fresno (all are locals because of mtn xmtrs; Wasco's elevation is 325 ft). The nearest VHFs are behind mountains and are weak: KSBY-6 (75) San Luis Obispo, KCOY-12 (70) Santa Maria, KEYT-3 (80) Santa Barbara, and Los Angeles (115). The FM band has been good for DX; however, the small handful of stations in Bakersfield, Tulare, Visalia, and Fresno has been slowly growing. There is very little trops to compare with that east of the Rocky Mountains in North America; ground wave here is limited to most of California and no more. Present Wasco, Calif. totals: TV seen 130; FM heard 158. Battery-powered gear for use on autos, trains, and mountains includes a 1964 Panasonic T-33 FM-AM portable and a Blonder-Tongue BTD-44 UHF converter (plugged into radio for UHF TV audio).

No DX has been noted, but there is some station news. KLYD-TV 17 is now broadcasting from Mt. Adelaide, 16 mi east of Bakersfield. Elevation is now 3790 ft (formerly 1330) and ERP is 1120 kWV and 240 kWA (was 234 kWV). Its appearance has not changed in Wasco—it was strong and snowfree to begin with (was 25 mi away, now about 35). KAIL 53 Fresno may not be on the air as listings in area TV Guide have been absent since December. On 1 Feb., call changes: KGEE-FM 101.5 Bakersfield to KGFM, and KCIB 94.5 Fresno to KFIG. Since early this year, KVCR 91.9 San Bernardino has been 5 kW (was about 800 W).

Thanks very much to the Western DXers for the big section.

Best of DX to all Dennis

PUBLISHER'S NOTE:

Sorry for the late mailing of this DIGEST but it was due to several factors: waiting for Morries stencils and personal problems. As some of you know, I've been unemployed for quite some time and I have had more interviews than lately usual. I now have a job, but night classes will end in 2 weeks so I'll a lot of free time anyhow. -fsd

wave propagation

Conducted by Dennis Smith

Last time, we talked about Sporadic-E skip; this month, we shall delve into the other well-known mode of propagation: Tropospheric Bending, which we know simply as trops. (The official abbreviation was "tropo," but the term "trops" seems to have enjoyed wider use.)

As evidenced by its name, Tropospheric Bending is a phenomenon of the troposphere, the area of the atmosphere extending up to about 10 miles above the earth. It is in the troposphere that weather patterns take place, and it is these patterns and their changing developments that can bring on an extension of the usual "limited" service areas of TV and FM stations.

VHF and UHF signals are refracted along boundaries of air, such as along layers of temperature inversions and along weather fronts. Temperature variations tend to produce these conditions in spring and fall quite often, so these are considered to be the trops seasons. The heating and cooling of sunrise and sunset has effects. And, winter openings can develop through unseasonal warming.

Tropospheric or trops DX is not limited to any portion of the VHF and UHF spectrum; it affects all such frequencies, therefore all TV and FM broadcast bands are subject to trops DX. It has no minimum distance and can be observed in near-fringe stations as loss of snow. There is no real definite upper limit, so that distances of over 1000 miles are possible, although anything over 800 miles is rare.

One of the usual characteristics of Sporadic-E is its rough fading action. Trops is generally noted as being much more steady. It is by noting reception characteristics such as this, including noting what frequencies are affected, that one can determine the propagation mode of a signal. A channel 4 signal at 750 miles could be seen by more than one mode, and would be somewhat more unusual by trops than by Es.

A small antenna such as rabbit ears will produce good results with Sporadic-E DX, but for trops, a larger antenna is definitely more satisfactory, and height makes a contribution as well.

Real trops DX, as we know it in North America, which can develop up to many hundreds of miles, can take place anywhere east of the Rocky Mountains. Weather can develop and change at any time of the year to bring on the proper propagation conditions, and the eastern mountains do not seem to be a complete barrier to weather patterns and trops development. In the mountainous areas of the west, however, climate characteristics are different and often divided into definite regions separated by high mountain ranges, which, in combination with the mountains' heights, limit any trops to these single regions, if a region is of enough extent to allow any existence of trops at all. At the opposite extreme, over-water paths allow the best development of trops DX, such as along the Gulf coast.

It is assumed that of all the VHF & UHF broadcast bands, the high VHF band (chs. 7 to 13 in the Americas) is affected the most by trops conditions. Actually, hams have noted that in the VHF and UHF ranges, the higher the frequency, the better the results in a trops opening over a given distance. The probable reason for the high VHF band making the best showing is in the years of development of VHF tuners in TV receivers and higher limits of power for high-band stations as compared to low-banders. If these reasons are true, the combined effects of genuine UHF tuner progress and high UHF transmitting powers may bring about some great results in trops on UHF as time goes on. We shall see.

PHOTO CREDITS:

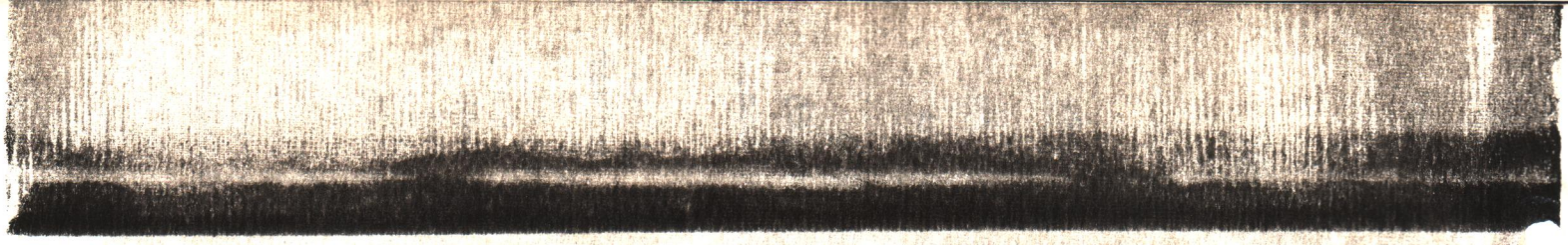
CKPR-TV
5 AUG.66
Glenn Hauser, Okla.
935 miles.

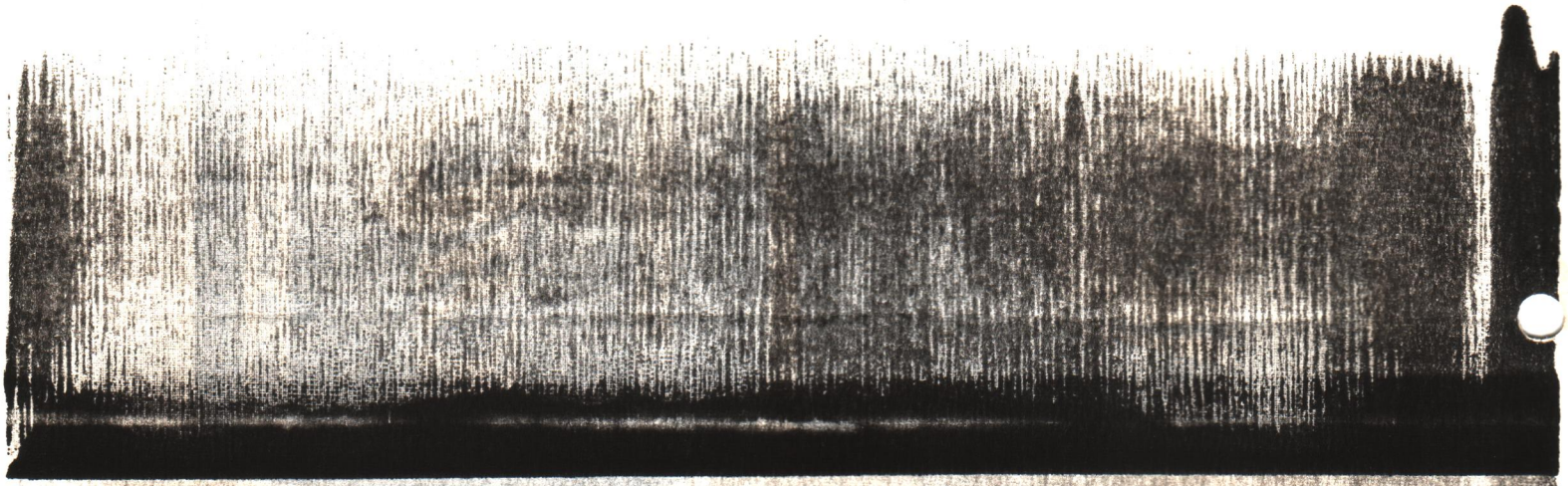
KRLD-TV
18 June,65
265 miles
Hauser,

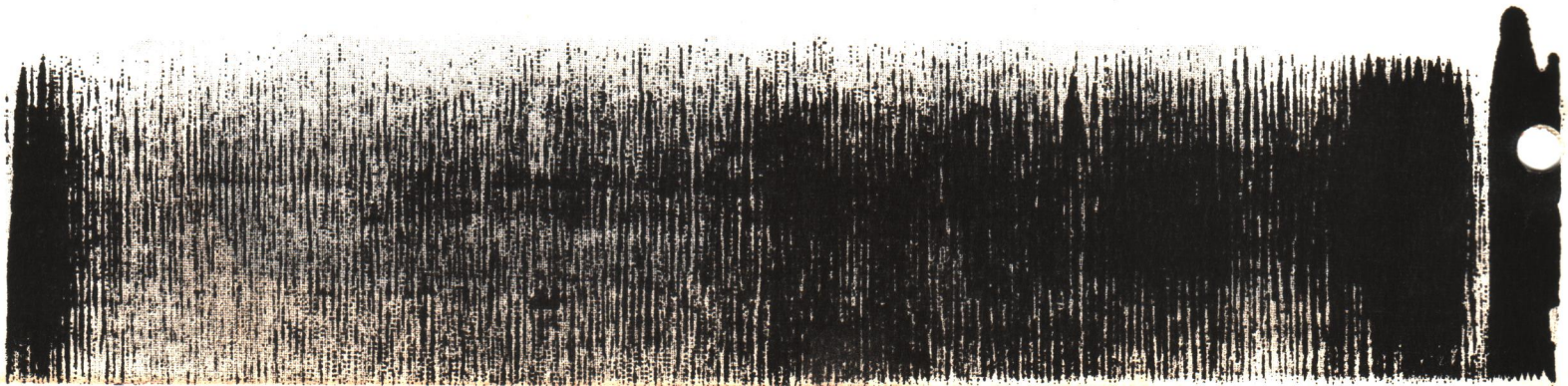
KHQ-TV,6
19 June,65
1260 miles.
Hauser.

The remaining photo is of our FCC editor Gary Olson, with a rare DX logging;hi. You will notice Gary seems puzzled---an unusual trait not usually found in old-timers in this hobby.

(Unfortunately, you will not receive the DIGEST on 1 April as originally intended.)







VHF RADIO

Vol. 7, Nr. 4
March/April,1968

Ferdinand S. Dombrowski Jr.
Box 5001, Milwaukee, Wis. 53204

This is the new look for the old international column. Roger Bunney now has the only truly international column, altho this VHF column will have foreign TV loggings from time to time. (Not Canadian.)

Dennis Smith sent me a list of old Hallicrafters receivers that contain the 40-50 MHZ band; thees receivers may be available used in your area:

S-20r: 540 khz-43 MHZ.
SX-25: 540 kHz-42 MHz.
SX-28: ditto.
SX-42: 540 kHz-110 MHz.
S-27: 27.8-143 MHz, AM-FM; (S-36: ditto.)
SX-43: 540 kHz-44 MHz, AM;;44-55 MHz, AM/FM.
SX-62: 540 kHz-30 MHz, AM; 27-110 MHz,AM/FM.
S-53: 540 kHz-54.5 MHz, AM.

I bought a copy of Tom Kneitel's "Confidential Frequency List" from Gilfer Associates, but it listed very few VHF stations, as a matter of fact 10 channels. I shall list them later.

The current issue of "Radio-TV Experimenter" for April/May lists VHF police frequencies in 100 major cities, but only 151-162 MHz. The article says 10,000 stations are licensed in that band, and 9,000 in the 37-47 MHz band, (only police stations mentioned). Since Uncle Tom assisted the editors in compiling the article I expected his list wud contain VHF stations, also, but alas no.

Two more IDXers from the AIPA have joined WTFDXA and complain about the poor F2 conditions this Winter of 1967/8. Bill Grant and Raymond Bell are new members. Ray says the sunspot count was so low that he hasn't bothered to watch or listen; Bill Grant sent his log for the Winter and compared it with 10 years ago. He got no video at all this season, but listed his audio reception from Britain and France. He also noted that the Swiss Observatory said the sunspot count was high on Feb. 1-3rd, (197-208), yet I have no report of F2 until Feb.6th.

I found my old list of Army receivers for the VHF band that may be available on the surplus market. This is only a partial ist for the receivers we used in my unit in Germany. 38-55 MHz is covered by the following: RT-68, RT-176, R-110, and may be covered by the :AN/GRC7-8, AN/PRC-10, AN/VRQ-3, AN/VRC-10, 15, 18 or 22. In addition, 40-48 MHz is or may be covered by the AN/VRC-3, BC-100, and SCR-300. I say IS or MAY BE because some of these receivers or transceivers are in parts & the tuning unit may be replaceable with others. (For example, the AN/TRC-24 that I operated consisted of transmitter , receiver and carrier eqpt with interchangeable panels; the receiver alone had 4 different plug-in tuning units which could cover a band anywhere from 50-600 MHz as I recall.) The RT-68 is a compact DC receiver in one part; the transmitter I believe was a separate unit attached to it. I believe it was designed to mount in a jeep so it is probably DC-only. Buying any surplus is like buying a pig in a poke unless you're familiar with the equipment because it may be DC only, or require an outboard power supply or have other limiting characteristics which require conversion,change.

Here's a resume of the Winter's F2 skip:

22 Oct. BBC-audio recd in Utica, NY.
18 Oct. Chile hrd on 6m in Calif.
29 Oct. ORTF-audio recd in Utica.
19 Nov. BBC and ORTF-audio in Utica.
25 Nov. ditto, in Utica & Worcester.
26 Nov. ditto, in Utica & Worcester.
30 Nov. 6 meters open, Calif to Conn
16 Dec. BBC-audio hrd in Utica.
23 Dec. BBC-audio in Worcester.
24 Dec. BBC-audio hrd both cities.
25 Dec. BBC-audio hrd in Utica.
30 Ded. BBC-audio hrd in both cities, and ORTF in Utica only.

(contd)

Resume of Winter F2 skip: (contd):

7 Jan. BBC-a, &video buzz, in Utica.
13 Jan. ditto, & ORTF-audio in Utica.
14 Jan. BBC-a, & video buzz, in Utica.
27 Jan. & 28 Jan.: ditto.
6 Feb. BBC-audio in Paxton, Ill.

Reporters:

Stan Penc, Utica, N.Y.
Bill Grant, Worcester, Mass.
Hal Schrock, Paxton, Ill.

If anyone knows where to get an inexpensive list of paging stations, police, fire, mobile telephone, etc. in the VHF bands, please let me know. Here is a complete list of frequencies and stations that I have to date, as reported to me personally by the DXers, or as reported in the bulletins of NNRC, CDXC, FDXC, and from Kneitel's "Confidential Frequency List:"

30.02 and 30.34: weather bureau radio in Mass., N.H., and Maine.
34.02 and 34.98: Me. & N.H. weahter bureaus; Coast & Geodetic Survey.
35.22 and 35.58: paging stations. 35.50: Oakland & San Diego mobile T.
35.30, 35.38 and 35.46: Los Angeles mobile T.; 35.8: KKV361 in Texas.
36.20: KKK561, Houston paging.
37.02 to 37.40: police.
39.02 to 39.98: police.
41.22: Coast Guard.
42.02 to 42.94: police.
43.22 and 43.58: paging stations.
44.62 to 46.42: police.
36.22 & 36.72: Coast & geodetic Survey.
38.22 & 38.26: Coast & Geodetic Survey.
39.62: Towson County Police, (Md.)
42.38: State Patrol, Menomonie, Wis.
42.06: State Police, Tipton, Mo.
47.20: police: Boise, Idaho.
49.12: Royal Canadian Mounted Police.

The paging stations I have listed so far:

35.22 MHz: WWA335, San Juan, P.R.
KCC482, Concord, N.H.
——— Baltimore, Md.
KIM905, Charlotte air pg.
KIN645, Miami, Fla.
KIY508, Orlando, Fla.
——— Detroit, Mich.
KAI927, ?
KKG561, Houston, Texas
KMB305, ?
KMD342, Fresno, Calif.
KMD691, San Diego air pg.
KOH280, Phoenix, Ariz.
KOK344, Boise, Ida.
KOP253, Seattle, Wash.

35.58 MHz: KEC515, Troy, N.Y.
KEC519, Rochester, N.Y.
KAQ606, Denver, Colo.
KAF245, Kansas City, Mo.
KIF650, Birmingham, Ala.
KIF651, Ft. Lauderdale, Fla.
——— Jacksonville, Fla.
KIG843, St. Petersburg, Fla.
KIG837, Nashville, Tenn.
——— Scranton, Penn.
KIQ999, ?
KKI445, Houston, Texas
KMA929, ?
KMD306, San Francisco, Cal.
KUA217, Honolulu, Hawaii

35.58 MHz: KMD344, Long Beach air pg.
KMD347, Stockton, Calif.
KME437, Santa Cruz, Cal.
KOA796, Portland, Ore.
KOF328, Tucson, Ariz.
KOF341, Salt Lake City.
KSD326, ?
KSC373, MilwaukeePage Boy
KSC645, Chicago, Ill.

43.22 MHz: KEA860, New York City.
KEC521, Buffalo, N.Y.

43.58 MHz: KAA893, St. Louis, Mo.
KEC516/8, Syracuse, N.Y.
KEA777, Buffalo, N.Y.
KGA804, Philadelphia, Pa.
KIF653, Memphis, Tenn.
KMD986, "Electro-Page Sacramento"(Cal.)
KSC644, Chicago, Ill.
KLA648, Albuquerque, NM—(FM sewer sta.)

(NOTE: the following sta. were heard in Europe, but I do not know the freq: KGC223, Philadelphia, Oklahoma City taxis.)

ANY ADDITIONS OR CORRECTIONS WELCOMED AT ANY TIME IN FUTURE!

APPLICATION FOR MEMBERSHIP:

Name_____ Age____ Call letters_____
Address_____ INTEREST: TV__;FM___
City/State_____ Dues: $3.50 worldwide.
Samples 30¢ or 2 IRCs.

Make checks payable to the club, Worldwide TV-FM DX Association, and send to:

LATE FLASH....

Pat Paulsen won the write-in campaign for president at Green Bay!!! Pat got 2 votes. Vince Lombardi and Bart Starr got one each.

THE EUROPEAN SCENE

Roger Bunney; Trelawne Cupernham Lane; Romsey, Hants S058JH, England.

I hope to cover this time the stations operated by the French TV service in band I. There are only 2 channels in operation, ch.F2 & F4. These offer the best potential for trans-Atlantic reception via F_2skip. Video is positive, (opposite to American), 819 lines, 50 Hz; audio AM.

ch.2: Troyes, 250kw horiz. Caen, 50kw horizontal.
Limoges,200kw horiz. Bastia,10kw vert.(Corsica).
ch.4: Nantes, 300kw vertical. Besancon,30kw vertical polarization.
Carcassone,100kw vertical. Ajaccio, 10kw horiz.(Corsica).

Audio frequencies: 41.5 and 54.4 MHz; Video: 52.4 and 65.55 MHZ.

Program times vary, but are roughly: Sat noon to 2330; Sun 0900-2400; weekdays 1230-1330 and 1800-2330. (Times are GMT+1hr.) On weekdays there are school programs which vary. ORTF is a national network but regional variations will occur at times. Test-card times start in the morning but the exact time seems to be up to the individual sta. Some begin test transmissions at 0900; the audio accompanying the T/C is often a re-broadcast of the longwave radio program.

About 2 years ago the RTF changed to ORTF: Office de Radiodiffusion-Television Francaise, (Office of French Radio & Television Xmssns.)

British Isles have changed to permanent Summer time--British Standard Time which is the same as Central European Time---GMT + 1hr.

Madrid-Navacerrada, ch. E2, increased its ERP to 250kw horiz.

One of the strongest stations operating in band I is located on ch. E3 in the Canary Islands with 350 kw horiz. One of its 3 power lobes is directed at 293° which could make reception possible in USA. It carries same T/C as Spain. I'll cover Spain in a future DIGEST.

News has come to hand that WLWD was received from Dayton, Ohio by Frank Smales in Pontefract, Yorkshire, (sound only), on 18 Jan.68 at 1530 GMT, (0930 CST), carrying a station identification.(Ch. A2.) At the present time, the propagation mode is unknown. Short duration.

Swiss radio announced a few days ago that the long awaited sunspot maxima would occur in MAY, 1968. Predicted smooth count for that month is 117. (Previously, the high had been predicted for NOv./Dec.)

Conditions have been extremely poor for several months here in the UK. Very little Winter Es was observed, and Ms has been quiet.

I must add further that although some lists still include Monte Carlo on French channel 2, this station is not operating at present & has not been for several years.

I hope that this months stencil is more readable than last time. I think that the roller-bearing spacing was wrong & caused bad typing.

Good TV/DX,

Roger.

EDITOR NOTE: Shortly after I began mimeographing Roger's stencil, a large hole developed near the top and I had to take it off and retype a new stencil. Gary Olson's April FCC page developed a long cut at the top also but I was able to continue mimeographing that page. Actually, I didn't know it was cut thru until I took it off the mimeo. ---fsd.

#4