

AMERICAN IONOSPHERIC PROPAGATION ASSOCIATION

Art Collins-Pres.  
68 Amber St.  
Buffalo 20, N.Y.

TV, FM-DX

King Schafer V.Pres  
360 Zimmerman Blvd.  
Kenmore 17, N.Y.

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Page one

Dec. 6, 1961

AIPA BULLETIN. Published monthly.

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FCC GRANTS.

WIBC of Indianapolis is to get ch 13 there. The Crosley station WLWI will lose the ch 13 there.

Hilo, Hawaii. ch 11 3.18Kw. 1.605Kw.

APPLICATIONS.

Ch 7 Bangor, Me. 63.1Kw. 31.55Kw.

Ch 13 Grand Rapids, Mich 316-158K.

Ch 13 Yuma, Ariz. 920.678Watt.

Ch 23 Houstin, Tex. 267Kw-146Kw.

Ch 20 Lubbock, Tex. 9.1Kw. 5.1Kw.

CALLS ASSIGNED ETC.

WDIQ(TV) Ed. Andalusia, Ala. fr. WAIQ(TV)

WAIQ(TV) Ed. Montgomery, Ala. from WDIQ(TV)

WVUA-TV New Orleans, La. (new)

WSEC-TV Ft. Lauderdale, Fla. (new)

WPFL(TV) Pittsfield, Mass. (new)

WCWT(TV) Wausau, Wis. (new)

WMHT(TV) Ed. Schenectady, N.Y. (new)

Mis'l NEWS.... The new WLEW-TV ch 10 Miami, Fla. went on the air Nov 20th. an ABC-TV.

CKPG-TV ch 3 Prince George, B.C. now on the air - 210Watts- 114 Watts.

WSIU-TV ch 8 Carbondale, Ill now on the air. (B.J. sends photo-test P)

CKBL-TV ch 9 Matane, Que. was off the air for about a week. changes now are new txr & Antenna. 303Kw.-182Kw Aud.

KTBS-TV ch 3 Shrevsport, La. has OK to go ahead with their new 1,600' Twr.

WHEC-TV ch 10 now a full time station in Rochester, N.Y.

KAIL ch 53 Fresno, Cal. almost set to go...also KDAS ch 21 Hanford, Cal.

Gary Olson sends word that a new relay on ch 70 in Champaign, Ill carries all the programs of WTVP ch 17 Decatur, Ill. They announce as WTVP ch 17 Decatur and 70 Champaign.

There are about a dozen firms making color TV receivers at present time.

For the Radio listeners in this area-especially the Montreal Boys----

A new Radio station here in Buffalo WUFO on 1080 took the place on WYSL they broadcast all jazz music etc. The Hound Dog is back in Buffalo with them...A day time station only. The WSYL went to 1400 Kg. taking the spot of WBNY which is no more---sold out! (Phil, listen for the Hound)

Word from Bill Leers and Dick Bergen of Ky. tells of a up-coming interview and photo taking for the Courier-Journal in Lexington. The write up will be about their DX hobby in television and of the AIPA.. Good work Boys.. that's what we need...

Don Voegele- our Lancaster, N.Y. DXer is now enjoying the warm weather of San Juan, Puerto Rico.

RE-NEWALS in from Milton Bay Brooksville, Ky. 6th yr.

James Stacey Jefferson, Wis. 2nd.yr.

Elwood Walter-Seattle, Wash. 2 nd yr. (nice hearing fr ya !)

Ed Hepp has moved to 5640 1/2 S. 23rd. Omaha, Neb. Ed is now with KOIL the Omaha out standing station on 1290 on the dial. (Radio) Txr work and announcing, has his programs etc. Nice going Ed and lots of luck.

There will be no Eastern DX report column this month due to the lack of DX and DX reports. Nieman says we'll give er hick next month !

Another year has rolled by and we hope that all our members have enjoyed their stay in the AIPA, and has in some little way enjoyed the bulletins.

A MERRY CHRISTMAS & HAPPY NEW YEAR TO ALL

Art Collins.

NEW CH. 4-12 TV RECORDS

CALL	LOCATION	DIST.	DXER
CHANNEL 4			
KFAC	Port Arthur, Texas	1300	RI
CHANNEL 5			
WPTV	Palm Beach, Fla.	1235	BH
CHANNEL 6			
CFCL	Timmins, Ont.	1165	BH
CHANNEL 7			
KETV	Omaha, Neb.	880	DN
KOSA	Odessa, Texas	410	BH
CHANNEL 8			
KSWs	Roswell, N. Mex.	425	BH
CHANNEL 9			
KRBC	Abilene, Texas	295	BH
CKLW	Windsor, Ont.	360	RI
CHANNEL 11			
KPLR	St. Louis, Mo.	445	BH
KGIN	Grand Island, Neb.	320	BH
CHANNEL 12			
KPAR	Sweetwater, Texas	305	BH
KEYC	Mankato, Minn.	575	BH

NEW RECORD HOLDERS

Ch. 4-R.	Italiano-1
Ch. 5-B.	Hauser-1
Ch. 6-B.	Hauser-1
Ch. 7-D.	Nieman, R. Italiano-1
Ch. 8-B.	Hauser-1
Ch. 9-B.	Hauser, R. Italiano-1
Ch. 11-B.	Hauser-2
Ch. 12-B.	Hauser-2

TELEVISION UHF RECORDS

CALL	LOCATION	DIST.	DXER
CHANNEL 15			
WMTV	Madison, Wisc.	125	DS
CHANNEL 48			
WCET	Cincinnati, Ohio	356	RS

NEW UHF RECORD HOLDERS

Ch. 15-D.	Swanson-1
Ch. 48-R.	Seybold-1

In Jan. I'll try to have a Ch. 2 Revised List also any new Ch. 2-13 and UHF Records.

May all of you have a Wonderful Christmas. May we all remember the Christ whose Birthday we celebrate. May you all have the most Wonderful Year of your life in 1962.

Dec. 26 Deadline.

Frank Wheeler, Box 176, R.D. 5, Erie, Pa.

STANDINGS OF ACTIVE MEMBERS

1.	R. Seybold	N. Y.	367
2.	B. Brown	Mo.	348
3.	B. Draeb	Wisc.	298
4.	R. Nieman	N. Y.	288
5.	A. Collins	N. Y.	281
6.	B. J. Bingham	Mo.	279
7.	K. Schafer	N. Y.	266
8.	D. Janowiak	Wisc.	263
9.	F. Dombrowski	Wisc.	259
10.	D. Nieman	N. Y.	245
11.	B. Meers	Ky.	233
12.	B. Eckberg	Ill.	228
13.	E. Rugel	Kans.	221
14.	B. Hauser	Okl.	215
15.	N. Erint	N. Y.	209
16.	G. Olson	Ill.	208
17.	B. Nieman	N. Y.	204
18.	C. Howington	Ohio	193
19.	J. Parillo	Ohio	173
20.	D. Ruland	Fla.	172
21.	T. Hidley	Ill.	167
22.	E. Prond	Ill.	160
23.	F. Wheeler	Pa.	159
24.	D. Johnson	Wash.	153
25.	J. Voegele	N. Y.	130
26.	D. Swanson	Ill.	129
27.	J. Pirch	Mo.	127
28.	R. Hilding	Ariz.	123
29.	R. Walker	La.	122
30.	R. Berg	Va.	120
31.	R. Bergen	Ky.	120
32.	R. Boyd	N. Sco.	113
33.	W. Scaulding	Ohio	117
34.	F. Cox	Cal.	116
35.	A. Friese	N. Y.	113
36.	W. Burritt	N. Y.	109
37.	D. Smith	Cal.	107
38.	C. Wood	Oreg.	106
39.	G. Pomeroy	Kans.	103
40.	D. Kanaar	N. Y.	101
41.	D. Combs	Mo.	99
42.	A. Kopec	N. Y.	98
43.	B. Rawling	Queb.	97
44.	J. Dillon	Sask.	96
45.	G. Grishain	Queb.	94
46.	R. Gaddy	Ohio	86
47.	H. Holbrook	Md.	73
48.	D. Webb	Mass.	69
49.	D. Black	Ga.	65
50.	R. Italiano	N. Y.	63
51.	C. Dabelstein	Neb.	61
52.	W. Hider	N. Y.	61
53.	A. Germond	N. J.	60
54.	J. Lutey	Neb.	58
55.	J. Habermehl	Ohio	46
56.	A. Preston	Cal.	45
57.	E. Norberg	Cal.	45
58.	E. Walter	Wash.	23
59.	J. Dyckman	Ohio	15

Average Stat. Rec. 148

Best gain-A. Friese-28

AMERICAN IONOSPHERIC PROPAGATION ASSOCIATION

WISHES TO ALL SINCERE

Dec. 6, 1961

With the spirit of Christmas in the air :  
We think that it would only be fair.  
To wish our fellow DXers across the Nations;  
Merry Xmas, Happy New Year & many new stations.

May your stockings be full of  
new gear, you receive everything  
And that you hold dear.  
There might even be a  
camera in the loot;  
It would be nice to have a new TV To Boot.

When your present rotor begins to  
click. good and look for St. Nick.  
Keep being

You never know if  
the corner he lurks;  
Show him how to D X and he'll  
give you the works.

May your loggings grow longer  
throughout the year.  
May your pictures be many, bright and  
clear.  
May your hobby be your best friend  
and not your foe.  
May your loyalty to the AIPA continue  
to grow.

WARMEST REGARDS FROM THE HIDLEYS

MERRY CHRISTMAS, AND HAPPY NEW  
YEAR TO ALL.

SEASON'S GREETINGS FROM  
AIPA HDQs &  
BOARD MEMBERS.

"RANK COLUMN"

DEC. 1961

by Walter W. Spaulding

--- FERDINAND DOMBROWSKI has logged the following report. ---

His farthest station on each channel

Channel 2	KENI	2600 miles (tent.)	CHSA	2	1300 miles def.
Channel 3	CFRN	1300 miles def.	KLEW	3	1480 miles tent.
Channel 4	CMUR	1465 miles def.			
Channel 5	XEJ	1385 miles def. &	KSL	1385	miles def.
Channel 6	KCIX	1475 miles def.			
Channel 7	WJDM	930 miles def.			
Channel 8	WJW	380 miles def.			
Channel 9	WSTV	465 miles def.			
Channel 10	WFBG	580 miles def.			
Channel 11	CHCH	450 miles def.			
Channel 12	WNBF	690 miles def.			
Channel 13	WQED	500 miles def.			
Channel UHF	WSEE	450 miles def.			

40 50 mc. Belfast 3700 def. Bremen 4200 tent.

His log is now 265 stations

He has received 40 states and 7 provinences

those not received are. Canada British Columbia, Newfoundland, Prince Edward Island. USA not received are Kentucky, New Hampshire, Rhode I. New Jersey, Delaware, New Mexico, Oregon, Nevada, Arizona, Hawaii.

He has seen Cuba, Mexico, England, No. Ireland, and tentatively Germany or Belgium, and the Dominican Republic or Puerto Rico.

--- At this place and time of the year we are all planning on a nice time for the holidays. My wife and our family and of course our Rank reporter (myself) wish each one of our great club members the AIPA a very Merry Christmas and a verry Happy New Year.

All I want for Christmas is for Santa to bring me 3 new stations on each channel. Or a week of solid skip.

Yours till next month  
Walter W. Spaulding  
R.D.#3 Box 168  
Cardington, Ohio



Dec. 6, 1961

AIPA STANDARDS

Campaign, Illinois

Along with the cold comes December, the last and perhaps happiest month of the year. As we celebrate the holidays that come with December, we think back to the happiest moments of the previous 11 months. Many of us immediately think back to the great summer of DX which came and went so quickly. And thinking of this we return to the magic dial at the cathode ray tube only to find to our dismay that there is nothing but the same old local and semi-local stations. All we can do is turn the heat up and hope for the warmer months to arrive sooner and bring with them the glorious skip, tropes, and other forms of freak reception which bring to a small minority of the world an unbelievable amount of happiness.

With December also must come once again another DX discussion in the Standards column. Our topic of discussion this month shall be the proper procedure in counting stations in the TV DXers log. Before coming to grips with any decision, some introduction to the problem is necessary.

A DXer may count a station in many ways. Some DXers believe in counting a new station when only a fragment of reception is received. Others rely on only positive identification before counting a station as an addition to the log. For several years a large problem has existed among the DXers of the AIPA and for that matter the DXers of the world. For these years DXers have adopted their own methods of counting stations. Nothing is basically wrong with this except that this has led to unfair recognition to some people due to unconforming standards. Some DXers count a station which changes channels, moves its transmitter, changes its call letters, etc. Other DXers, more conservative in this respect, do not count anything more than once and make sure they are absolutely positive in counting any addition to their logs. This problem has led to a great controversy among the DXers who should have some bond of uniformity among them. There is no problem in counting stations your own way; however, in a listing of such stations some people may be favored and others may be slighted due to their own methods of counting.

Several years ago a young man running a TV DX column in a nationally published magazine attempted to standardize counting procedures. The need for conformity was apparent since this DX column carried a listing of the top DXers in the country in a numerical fashion with the leader at the top and on down the list. This attempt at standardization resulted in complete chaos as many followers of the hobby rebelled at the new standards and continued counting in their own fashion. At the AIPA conventions this problem has been placed in the open with a great deal of questioning and frowning over one another's methods. In recent months the AIPA has concluded from the opinions of its elected officers that a standardization is needed. It was expressed that a DXer may use his own system in counting for his own uses; however, when a public listing is used such as in the bulletin, there is a need for conformity. In the future a method shall be used to show DX totals in the AIPA bulletin. The new suggested system should help the recognition aspect. Example:

Name	Location	Total Received	VHF	UHF	Verified
John Doe	Hometown, USA	154	140	14	121

The above listing would replace the old rank column of DXers.

Aside from this is the question of how to count the stations. The AIPA board members have been working on a counting system which will please the majority of the DXers. Much of the dissent has come on the topics of: (1) share-time stations (2) station channel change (3) what determines the difference between a tentative and a positive logging (4) station change in ownership. There are many more which could no doubt fill up half a typewritten page. As you can probably see by now, there is an essential need for conformity in station counting.

This question shall be decided in the near future. If you have comment on the counting of stations please contact Art, King, or your board members. We shall discuss this further next month.

-Best of Xmas Es-

December, 1961

It seems the cold months have not yet put a damper on the reports. I hope to find DXing continues all winter.

REPORTS

Dave Pomeroy sends in a report from College of Emporia in Lawrence, Kansas. Dave DX's with a Motorola receiver and an indoor antenna. KANU Kansas University is received often at 100 miles. Also WIBW 97.3 in Topeka, Kansas has been heard testing. Dave has plenty of FM news (See Station News).

John Dyckman of Canfield, Ohio reports the following: WBVP 106.7; WSOM heard on Aug 19, & 20 Sept 1, 2, 3, 10, 14, 16, 17, & 30 Oct 1, 4, 5, 6, 7, 17, 18, 20, 22, 23, 24, & 26 and Nov 12; WKBN 98.9 heard on Sept 4, 5, 6 & 7 Oct 12, 13, 19, & 20; Sept. 15 WRED 101.1 also on Sept 17; Sept 17 WWSW 94.5; Oct 2 WWSW; Oct 8 WNOB 107.9; Oct 9 WNOB 107.9; Oct 10 WCNO 106.9 New, also on Oct 11. John heard the above tropes with his Heathkit FM-3A, indoor diapole, and Bogen TV booster.

Our fine new member from Englewood, NJ, Al Germond, reports the following: The seasons final good opening came on 11-3 and two new stations were noted. WKOX-FM 105.7 Framingham Mass and WPFM 95.5 Providence RI, were both noted on the FM during a good north-east opening. Al stayed up after midnight to try for WUPR 105.3 Lynn Mass but it was not to be heard. It probably was not on although last Aug it was an All nighter. They are 100% FM MX stereo but have not been too successful with it. The 24 hr sked may have been dropped for financial reasons. Recently, have had trouble getting even the Phil Stations. Rains washed out reception of Baltimore and Washington stations which were normally received rather well during this part of the year. Al's DXing equipment Eico tuner and a 10 element yagi.

Hank Holbrook of Bethesda, Maryland finds the FM band dying out, but he did manage some excellent catches. CFRB99.9 200 kw Ont (360) first foreigner on 9-18, also on 9-18 WMIT106.9 26kw NC (360) Mobile DX from High Knob on the Catoctin Mts 9-18 WAZL 97.9 3.5kw (140) Pa 9-30 WTAR95.7 Va. (190) 10-1 WHFS102.3 1kw Md From Swift Run Gap on Skyline Drive Blue Ridge Mts 11-5 WAMU88.5 4.1kw, WGAY99.5, WFAN100.3, WMAL107.3 the above all are Washington DC (100) Some veries received recently WDBN Ohio 94.9; WBAB 102.3 NY; WGNC 101.9 11kw; wvot 106.1 NC: WBBW 93.3 Ohio; WTOA 97.5 NJ. Veries now at 191 from 20 states and 2 countries.

STATION NEWS

Dave Pomeroy reports the following Station news: KSTE ? is due on shortly in Kansas. KTOP 100.3 Topeka on Sun afternoons only. KPRS ? applied for FM station in Kansas City. KANU in Kansas to begin stereo by Christmas. KBEY, in Kansas City, is their only 24 hr station.

Dennis Smith reports the following from California: KHFR 96.9 Monterey 18kw now on. KSFX 90.1 San Francisco also on. KQBY Frisco, silent since 7-16 now back on with 10.5kw at 95.7 with new call KKHI. KONG 92.9 Visalia on since Oct 30 MX station. Dennis includes a list of 24 hr stations to be published at a later date.

John Dyckman reports that WCNO 106.9 in Canton Ohio simulcasts with WCNS900kc. Verie signer is Sal Butera, Manager. Slogan is "56 minutes of music every hour."

Ferdie Dombrowski reports WPMR to begin MX soon. WMKE and WFMJ, Milw, transmit mx now.

Al Germond reports: WTFM 103.5 NY started broadcasting 11-25, should be 24hr MX immediately. WTFM is old WGLI. WTFM was moved to Eastern Queens and its power raised from 15 to 20kw. The old WGLI will be replaced by WQMF, 94.3, which will start 12-1. Al also includes a list of all nighters to be used later.

Many suggestions were received as a result of the request in last month's bulletin, so some of the suggestions will now be reviewed.

Many of you are undoubtedly aware of the Jones FM log. According to Dennis Smith, this list tells if the station is an all nighter. I would greatly suggest that all FM DXers acquire this excellent log. Details as to address ~~an~~ etc. were given in last month's bulletin. However, a few of the members have responded with all night listings, and some of these will be published at a later date.

Methods of reporting FM loggings have been commented on by a few members. Al Germond suggested that each reporter present a resume of his DX in written form when necessary. As an example, if the reporter feels that his logging has some special significance, he should include a sentence or two to reveal its importance. Logging a 100 watt station at 200 miles might be a typical case. Standard report forms, available through the AIPA, can of course be used. A letter, through which the report is presented, can also be used if additional information is necessary. Discretion should be used in all reports. If the DXer honestly feels that attention should be called to a certain log he should indicate so. An example of a report of this kind appeared last month. I copied Al's report for Oct virtually word for word. This method eases the editors job as he merely has to change the tense of the report.

Hank Holbrook suggested a new method of presenting a log in a given report. By examining Hank's report for this month, it can be seen that a complete description of the station is given. I, however, feel that this would create too lengthy of reports during the summer months. I would appreciate comments as to how the reader would like to see the station listed. I feel that call, frequency, and either location or mileage would do the trick. In this manner <sup>one</sup> could easily evaluate the worth of a given logging. Again discretion should be used in reporting and in reading of the logs in this column. Some ~~of~~ have to be content with an indoor dipole, and as a result DX is anything over 100 miles. Others enjoy 300 mile reception on a daily basis. It should, therefore, be realized that by including the mileage or location of a given station we are not trying to make fun of a certain DXer's efforts, or to praise the DX of another.

I think that both ~~ideas~~ are good and I will try to get some sort of pattern in the future; Your suggestions are greatly appreciated and the result should be a FM section that is acceptable to all. Thanks a million for all the comments.

I forgot about one suggestion by Dennis Smith only because I am going ahead with his plan without comment! This is a list of totals of all FM dxer's in the club. You can send in your totals including some of your better loggings on skip, tropics, etc. When I accumulate enough totals, the list will be published.

The end of another  
year

Soon after this bulletin is received, we will all be enjoying the Christmas and New Years Holidays. I would like to take this time to wish all my fellow members a most joyous and happy holiday.

We can be thankful indeed for some fine memories of 1961. The skip season was one to be talked about for quite some time. New members of the AAPA were treated to the thrills of skip that were so common four years ago. But the top memory of '61 must be the great convention at Dick Miller's. Yes, it was a memorable year. It might be a good idea to realize just how lucky we are. The enjoyment of a good hobby, fellowship and good will of pen pals, and any other benefits that can be derived from our hobby are not mere routine events. We should thank the Creator for the freedom that this country enjoys so that we can enjoy and reap the rewards of a fine pastime. Let us all hope that we will always be able to enjoy the benefits of a fine hobby, a fine life, and a free country.

Merry Xmas and a  
Happy dx year,  
Dave

"Your AIPA Monthly Meteor Scatter Column"

Conducted by: ~~Bill Draeb~~ ~~Ellis Street~~ ~~Kewaunee, Wis.~~

Well, reports are very few this month infact there is only one-----

Bill Hauser, Enid, Okla.---Sept.23 WBBM-2, WJBK-2; Oct. 14 WMAR\*2, WGR-2, WLWT-5, WAVE-3, WRCP-3, WBTW-3; Oct. 15 WKZO-3; Oct. 21 KYW-3, WBTW-3, unideds on 7,8&11, WHDH-5(new). Thanks alot Bill. Bill's total is now 215.

I myself didn't do much DXing during the month. If I did see any thing it was on UHF and I did see some pretty good UHF openings. On the 21st there was a very good UHF opening in which I saw 23 UHF stations. One of them, WFIE-14 I saw for the first time in 3½ years but it wasn't as good as it was then.

Here is another report from Bill Hauser:

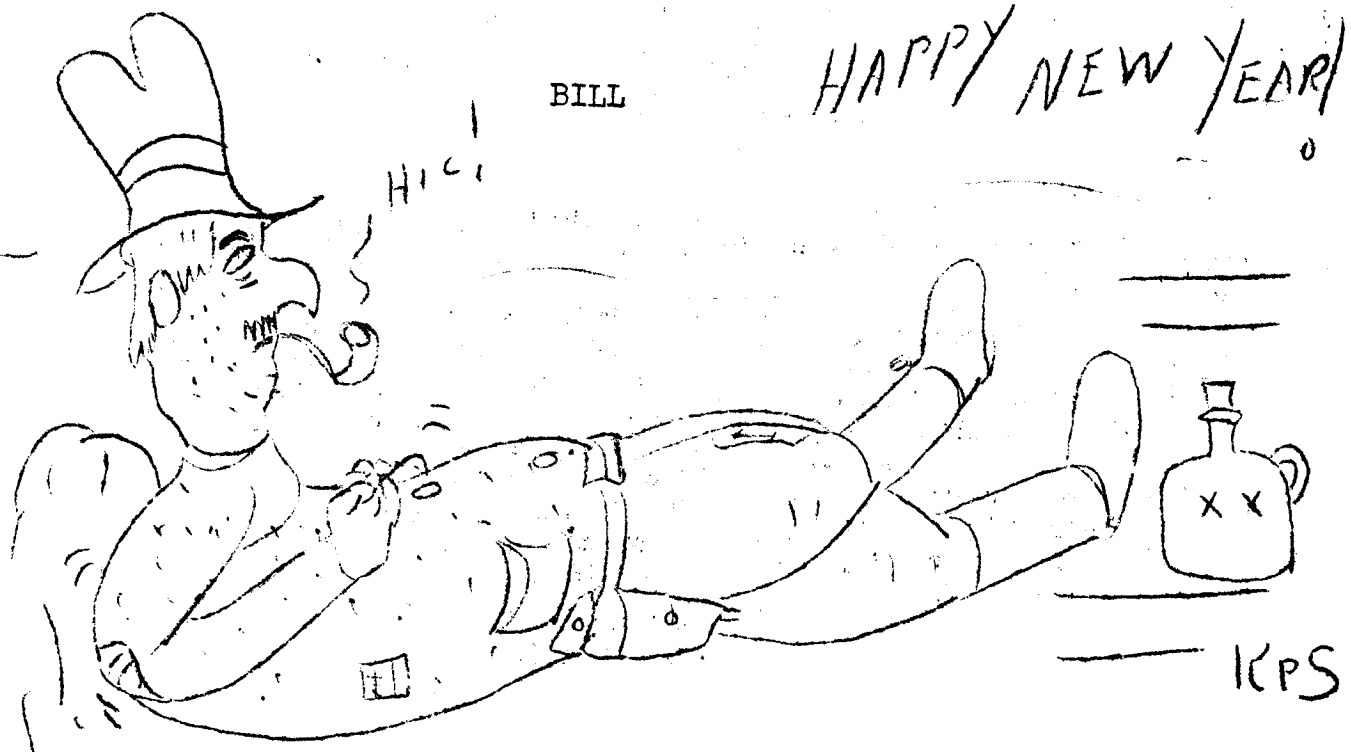
Oct. 22 WTAE-4, WEWS-5, WBTW-3, WJBK-2, WBBM-2, Oct. 23 WDAY(new), #WROC-5 Oct. 28 WTAE-4, Nov. 18 WBBM-2. His log is now at 217 with one new on Ms and one on ES.

My tower came a couple of weeks ago. I got 50' of it up now and the rest will be put up as soon as there is some good weather.

Here are some Meteor showers to look for: Dec. 13---The Geminid shower. I guess that is the only one in December of any importance.

I've been thinking about starting another Ms contest but have not as yet decided on one with rules that would be fair to all. I have gotten one suggestion on how to run the contest and I would appreciate your suggestions if you would bother sending them to me. I therefore will wait till next month before I start the contest. Next month for sure I will start it though.

So lets get your reports in here anyway and until next month 73's and good DX.





I just read in the local newspaper that RTF is going to finance the French UHF TV network by issuing bonds. Quite a surprise to me. Operation of the network will begin in late 1963. Some of the stations are already on the air, but only a few.

I received a letter the other day from Bill Hider in Binghamton, N.Y. asking about multi-system conversion and IDXing. I may as well repeat it here for any new members who may be interested.

IDXing, that is TV-DXing Europe and other countries beyond 2000 miles, is virtually impossible at this time, and will be until 1967 during the next sunspot cycle. F2 skip above 40mc is highly unlikely during the off-years 1960-7. Dennis Smith in California reports skip up to 35mc but 41 and 45mc European TV reception is extremely unlikely at this time. Hence, I would discourage conversion at this time since because you'll be sitting in front of the receiver for nothing. But if you want to convert now anyhow, and theoretically you may be able to see something via over-the-pole Aurora skip, then here is what you are in for: you must change the horiz. oscillator frequency from 19,750 cns to 10,125 for British standards by approximately doubling the capacitance in the oscillator circuit; you may wish to change the polarity of the video signal since it will look like a photographic negative as is. This is done by reversing leads to the video detector plate and cathode. You can't tune audio and video and simultaneously so you'll have to settle for one or the other, unless you use 2 receivers. British audio is AM and if your TV receiver will not pass it you may not hear audio anyhow. But the main thing in conversion is the RF frequency.

Our TV in America begins at 54mc and in Britain at 41mc. You'll need a variable tuner covering 40-54mc at least and up to 60mc or higher if possible. My next converter will go as high as I can get it to go, preferably 70-100mc, because I feel that all American TV stations will move to UHF within 10-15 years. If your lucky you may be able to pick up an old TV set with a variable tuner covering channel 1 which has been extinct for about 14 years. Mallory makes variable tuners from 54mc up, and possibly 44mc up. I got a 54mc model from a wholesale dealer in NYC but haven't had time to work on it yet. Any suggestions on how to get it down to 40mc anyone? I'm rather new at this. Otherwise you may wish to use a 40mc shortwave receiver, or convert an FM receiver as such as the Heathkit FM3A which a few members did during the last IDX seasons. Since signals are usually weak, the converter should be one with enough power to amplify the signal sufficiently to sync in.

There is a slight chance that you may be able to hear 41mc audio from Britain and France, if you're going to do any conversion now, I would suggest only conversion of a shortwave receiver or building of a modified 6 meter converter to receive 41mc. 50-54mc converters are commercially available, and amateur radio magazines have do-it-yourself 6 meter converters and receivers from time to time among their construction articles. It doesn't take much to change the frequency of these.

I have a few books for sale which I offer at half-price or best offer: "Key Checkpoints in 1951-2 TV Receivers"-\$1; "1955 Auto Radio Removal"-\$1.50; "1953-5 Dial Cord Stringing Guide"-50¢; "Pay & See TV2-75¢; "Basic TV-Vol.1"-\$2.50 (a practical training manual); 2 Tape Recorder Manuals @1.50, covering 1956-7 and early 1959; Record Changer Manual for 1956-7 @1.50; 1956 "Audio Amplifiers & Ass. Eqpt." @ \$2; 2 Servicing books @1.50 on 1956-8 amplifiers, preamps, tuners, P-A systems and receivers. Also: "Metallic Rectifiers"-\$1.50; "Attenuators, Equalizers and Filters"-\$1.25; "Atomic Radiation Detection & Measurement"-\$1.50; 1961 summer supplement to World Radio Handbook, 50¢; Jan. 1961 Tube Substitution Handbook, 75¢, not the most recent edition; \$4 "Electric Circuits & Machines" (hard cover); all others soft covers.

I just found a note here that the Paris UHF station will begin to recasting next June on 625 lines. Upon checking through my station list I find that this is the only announced station so far. I must have confused the West German and French UHF networks earlier in this column.

WMTV-33 went to ch. 15 a few days later than I announced last mo. but they're on 15 now, loud and clear. Although 50-some miles away, it comes in clear as a local UHF now; noticeably better than WLEX-18 which is only 27 miles away. ERP's of the 2 stations are practically the same but tower heights vary considerably; 1200' WMTV, and 695' WLEX. To top it off, my UHF antenna is only 25' a.g., in the trees and consists of only 4 bo-ties. WKOW-27 is worse than it was before so I may have a weak 6AF4A holding down my signal strength. A while ago when Billy Draeb received WLEX-18 again, I saw no UHF DX whatsoever, and I'm 100 miles closer to the station than he is! DX can override my local UHFers without much trouble so that's not the problem. Billy also got WKYT-27 and several other stations that appear at all here.

didn't

Now to get back to the station list of the European Broadcasting Union which I have been quoting in recent months: (contd from Oct. †:

Portugal: Lousa (Coimbra), ch. E3, 50kw.  
 Rumania: Bacau R1; Bucaresti R2, 20kw; Or. Stalin R3.  
 Spain: Madrid-Navacerrada E2, 200kw; Madrid-Chamartin E3, 2kw; Zaragoza-La Muela E3, 6kw; Barcelona E4, 25kw.  
 Sweden: Hörby E2, 75kw; Örebro E2, 60kw; Uddevalla E2, 1kw; Vännäs 2 60kw; Skövde E3, 15kw; Sveg E3, 15kw; Östersund E4, 60kw, and Stockholm E4, 60kw.  
 Switzerland: Bantiger-Berne E2, 30kw; S. Salvatore E2, satellite of Italian RAI; Uetliberg E3, 12kw; La Dole E4, 144kw, directional.  
 United Kingdom: London-Crystal Palace B1, 200kw; Belfast-Divis, No. Ireland B1, 12kw; Thurmster, Scotland B1, 7kw & 3 repeaters.  
 Manchester-Holme Moss B2, 100kw; Londonderry, No. Ireland B2, 1kw; Plymouth-North-Hessary Tor B2, 14kw dir.; Inverness-Rosemarkie, Scotland B2, 1kw dir.; and 3 other low power stations.  
 Cardigan-Blaen Parkway, West Wales B3, 2kw; Edinburgh-Kirk o' Shotts, Scotland B3, 100kw; Rowridge; Isle of Wight B3, 32kw dir.; Norwich-Talconeston, E. Eng. B3, 15kw directional.  
 Les Platons, Channel Islands B4, 1kw; Aberdeen-Meldrum, Scotland B4, 17kw dir.; Carlisle-Cumberland-Sandale B4, 16kw dir.; Birmingham-Sutton Coldfield B4, 100kw; and 3 other low power sta.  
 Yugoslavia: no stations in Band I.

THIS CONCLUDES the E.B.U. station list of 1 March, 1961. Every 2 months I receive a supplement to the basic list, and I will list the additions, deletions and changes next, from the supplements; as before, I am listing only Band I stations in Europe proper. I have a chart of stations and frequencies available, first come-first served, for 5¢. It lists all sta. as of March 1 in Europe, in progression from 41 to 58mc.

AUSTRIA: Auf der Wag; E8, formerly Hieflau; Hochreiter E3, formerly Friesach; Add new sta.: B4/ none in Band I. Sorry I goofed on E8.

FRANCE: temporary new sta. at Carcassone-Pic de Nore, F4, 1/2kw xtr.

SWEDEN: ch. E2 at Hörby up to 100kw with 650 ft. tower.

Spain: Madrid-Chamartin E3 moved to E4, still with 2kw.

~~SWITZERLAND~~ SWITZERLAND: Uetliberg, (Zurich), E3, went up to 60kw.

ITALY: Piazza al Serchio A; Ossimo A; Montebello Jonico B; Belvedere Sorbano B; Pietragrande B; these are all very low powered sta.

THAT CONCLUDES the EBU supplements #1, 2, and 3. Practically all stations listed in them are high banderd and UHFers. Band I is pretty full. 73s.



First thanks very much for the cards and letters, and please write and ask questions about anything that is not clear to you..

Before attempting to investigate the possible relationship between weather and tv-dx, it will be necessary to use the next two columns to explain some basic facts about the earth's atmosphere and its relationship to radio and television propagation. In February, then, a few basic details about weather and its relationship to the upper atmosphere will be outlined. Thus by March a start can be made toward the ultimate goal of relating weather to tv-dx in such a way that any tv-dxer by watching a weather program will be able to make a reasonable guess as to the possibilities of tv-dx. Please keep in mind, however, that any approach in relating tv-dx (other than that which is tropospheric in nature) to weather is scientifically very dangerous. Yet, from the many cards and letters received and from my own observations, it is quite easy to assume that there is a very definite connection between weather and even sporadic-E dx, a thing which appeared utterly impossible just a few years ago, before weather satellites and radars went into action.

### THE ATMOSPHERE

For radio and television propagation purposes, the atmosphere can be divided into two portions, the troposphere and the stratosphere. In the former portion tropospheric reflection, refraction, and ducting occur. In the stratosphere only the ionospheric propagation portion is of interest to us.

#### THE TROPOSPHERE

The troposphere or weather-producing section of the atmosphere is, of course, the lowest air layer and has a maximum depth ranging from approximately 59,000 feet over the equator to about 24,000 feet over the polar regions. The top of this cloud and weather zone or troposphere is known as the tropopause.

#### TEMPERATURES IN THE TROPOSPHERE

Temperatures decrease steadily with height through the troposphere up to the tropopause, where they begin to rise again upward through the stratosphere. One of the strangest results of this is that air over the equatorial regions in the highest part of the troposphere is much colder than air over the polar regions. Over middle or temperate zones such as in the United States, the tropopause varies in height with the season so that temperatures in the upper troposphere fall to their lowest points in the summer. We should keep this in mind later in March or April when we try to connect E-skip with weather.

#### TEMPERATURE INVERSIONS

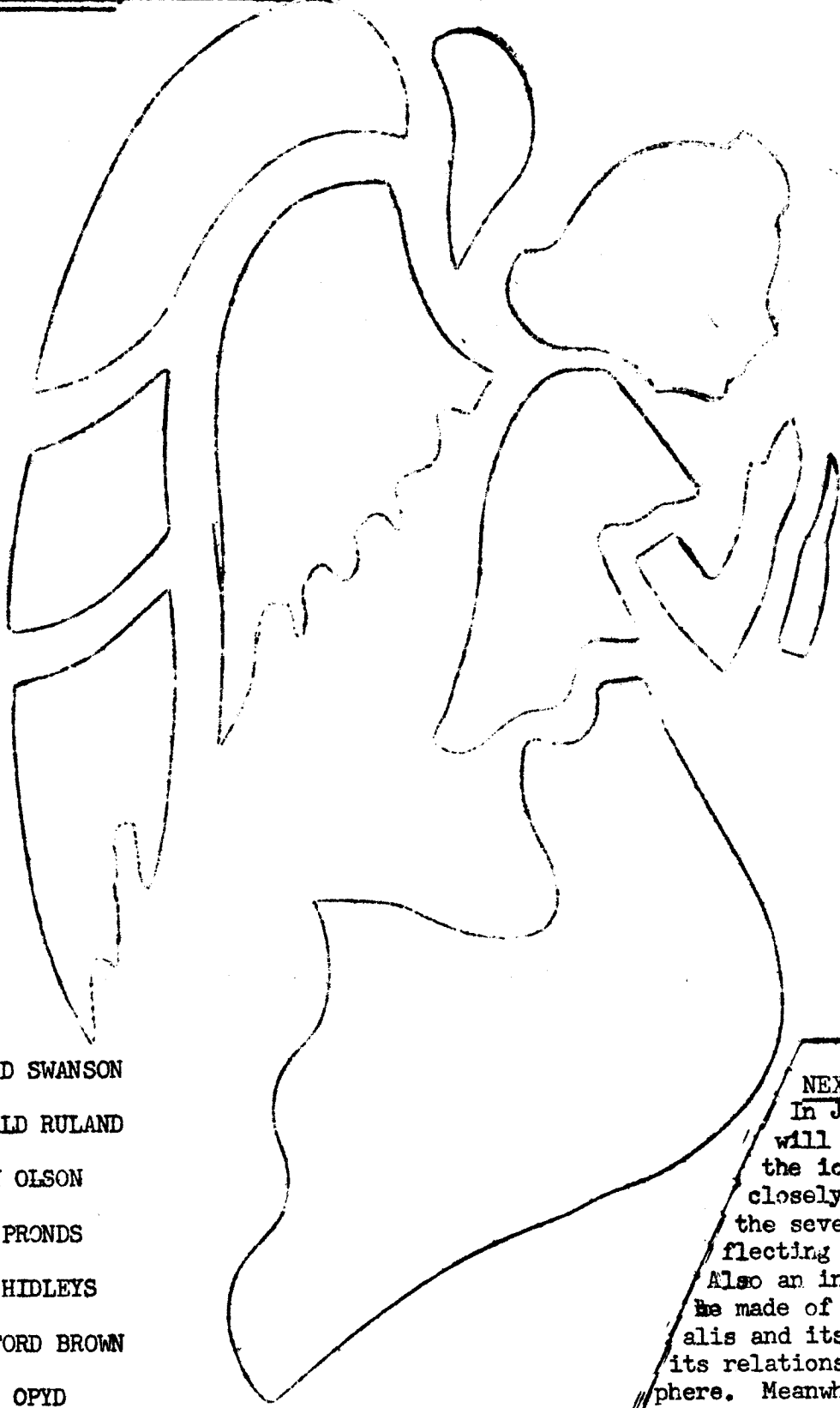
There are always irregularities in the normal temperature lapse rate (rate of temperature fall) in the troposphere. Occasionally under local weather circumstances, temperatures actually rise with height instead of falling upward through the troposphere. In other words there is a layer of warm air aloft over a layer of colder air. These irregularities or temperature inversions, coupled with high relative humidity, will be important factors in March and April, when we try to link tropospheric dx with the weather.

#### THE STRATOSPHERE

The stratosphere is that portion of earth's atmosphere lying above the tropopause, the top of the troposphere. For the next several thousand feet upward from the tropopause, temperatures rise slowly at first and then sharply. Then a strange, sudden drop in temperature occurs, followed by an equally sudden rise. This weird layer of cold air, surrounded by warm air, is known as the stratospheric temperature inversion.

see next page

sion. Roughly just above this strong inversion (and far above the tropopause) lies the ionosphere, that section of the stratosphere of interest to radio-tv-dxers.



HOLIDAY  
GREETINGS  
FROM  
THE  
CHICAGO  
DXERS  
TO  
THE AIPA



- DAVID SWANSON
- DONALD RULAND
- GARY OLSON
- THE PRONDS
- THE HIDLEYS
- BEDFORD BROWN
- JOHN OPYD

NEXT MONTH

In January an attempt will be made to define the ionosphere more closely and to describe the seven radio-tv reflecting layers within it. Also an investigation will be made of the aurora borealis and its cause as well as its relationship to the ionosphere. Meanwhile, if there is any point which confuses or dis-

turbs you, please write to me. I shall be more than happy to answer all questions, comments, or criticisms. My sincere thanks to Tom and Erma Hidley, two of the most wonderful persons I have ever known, for their Christmas artistry for this page. So until January, 1962, then, Merry Christmas, Happy New Year, and best dx, Bedford