This page of the Bulletin is for use of amateurs who have RTTY EQUIPMENT FOR SALE OR TRADE and those looking for equipment to buy or trade. It is a free service and may be the means of getting someone on the air.

W3PYW at W3CZE WINNER 1959 BEEPSTAKES SS CONTEST

NEWS OF AMATEUR RTTY

JANUARY 1960
25 Cents
Vol. 8, No. 1
**RESULTS 1959 RTTY “BEEPSTAKES” CONTEST**

Another SS contest is history, and the transmitters are cooled down but the memory lingers on. We all missed our Beep, this contest, his interest in such activities are well recorded in past RTTYS and other magazines.

Top honors go to a fairly new RTTYer's station, W3CZE, operated jointly by himself and Frank White, W3VPW. Ray writes as follows: "In addition to being Frank's secretary during the Beepstakes I was also the official photographer doing not so well as the only camera I had was one that I have taken to the west coast several times, and never took any pictures. And the film was two or three years old, so the results are not too good. Enclosed are the results. Ray, W3CZE.

Frank writes, glad to hear the news that we took first place. The equipment used was as follows:

- 2 Model 26s, 2 Tape transmitters, 2 Collins Receivers, 2 KWS-1s.
- L model 14, 2 power meters, 2 TUs, and 2 antennas.

Closely following Ray and Frank is another old timer as far as RTTY, Skipper, W2RUI, and then next was Jim at W5YM, W3MHD, W6JAV, W2JAS, W5BCP, W5JQB, W4KU, W3PRQ, W5KOT, W5GK, and W3BDS.

In the DX department were to be found:
- VK3KF, ZL1WB, G3CQE, KG1BO, KL7CAT, KL7UIA, KL7USA. This is the first RTTY contest for G3CQE in England.
- As far as the logs received, RTTY lists some 152 stations and some 48 sections. Not all of the stations taking part in this BEEPSTAKES sent their logs in, so it is possible that other stations may have taken part. Listed below are the results in detail.

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**Additional Information**

- **Call**: W3CZE
- **Section**: Conn.
- **Contacts**: 108
- **Pts**: 210
- **Sections**: 40
- **Score**: 840

**Contact Lists**

- W3CZE: 108 contacts, 210 points, 40 sections, score 840
- W6ZGK: 6 contacts, 26 points, 6 sections, score 156
- W6MGW: 34 contacts, 67 points, 26 sections, score 670
- W4FJ: 6 contacts, 12 points, 6 sections, score 72
- W4FZV: 42 contacts, 84 points, 23 sections, score 1932
- W6GNG: 28 contacts, 56 points, 18 sections, score 1008
- W6H5T: 13 contacts, 34 points, 19 sections, score 646
- W6H5G: 28 contacts, 56 points, 18 sections, score 1008
- W6FSC: 13 contacts, 34 points, 19 sections, score 646
- W6KSL: 28 contacts, 56 points, 18 sections, score 1008
- W6VUE: 13 contacts, 34 points, 19 sections, score 646
- K1WCL: 28 contacts, 56 points, 18 sections, score 1008
- K1QEX: 13 contacts, 34 points, 19 sections, score 646
- K1AXL: 28 contacts, 56 points, 18 sections, score 1008

**Additional Details**

- **Total Contacts**: 154 stations
- **Total Sections**: 48 sections
A high degree of calibration is normally not required for audio signal generators when only gain-frequency runs on amplifiers and similar measurements are to be made. Frequency calibration accuracy of about ±2% is considered quite adequate for the general run of laboratory audio signal generators. The Wien bridge audio oscillator in the RDJ Pulse Analyzer also falls into this class when in good condition and when properly aligned. The RDJ has appeared on the surplus market at reasonable prices in recent months. The better kit instruments generally have an accuracy of about 3%. Most of the RC audio signal generators have excellent waveform and constant output amplitude characteristics.

In the design of filters for radioteletype or other critical applications such limited frequency calibration accuracy leaves much to be desired. As an example, a 2% accuracy results in a possibility of about 70 cycles error at the tone frequency of 2575 cycles. Similarly, a 3% accuracy results in about 150 cycles error possibility. Accordingly, some more precise calibration method must be resorted to if the general run of audio signal generators are to be used effectively. Where counters or other precision audio frequency measuring devices are available this presents no problem. However the average radioteletype usually has access to only the basic essentials of test equipment such as a scope, audio oscillator and VTM. And they are frequently of the kit variety. Some readymade means of frequency calibration is very necessary if filters and other frequency sensitive components are to be constructed and aligned properly.

Fortunately in most areas there is a readily available audio frequency source of fairly high precision and good waveform. This is the 60 cycle power line. The large power networks have the power line frequency automatically held to very close tolerance under normal conditions. Averaged over a few seconds the 60 cycle line frequency is normally accurate to within a few hundreds of a cycle. During a very short interval there may be some deviation as corrections are being made. This deviation should normally not exceed 0.15 cycle and is usually corrected very rapidly. Frequency comparison between the audio signal generator and power line frequency "standard" can be made over the entire audio frequency range of interest to radio teletype using an oscilloscope and the Lissajous figure method.

With the 60 cycle power line source fed to the input of the scope vertical deflection amplifier and the audio signal generator fed to the horizontal input, Lissajous patterns will appear to come to rest on the scope screen as the generator is tuned through its range. For example, at 2000 cycles the pattern will appear to come to rest as two vertical trains of sine waves, compressed at top and bottom. As the audio signals change phase or drift slightly in frequency the two waves appear to drift past each other, one going up and the other down. If the pattern could be made to stand still and it was possible to count them, there would be 30 loops vertically and one horizontally at top and bottom. This is the 50:1 pattern. Due to small varia- 

tions in phase and frequency of the two audio signals it is rarely possible to keep the pattern stationary for more than a fraction of a second.

The audio oscillator frequency is changed slightly other more complicated Lissajous figures will appear to come to rest momentarily. At 2970 the figure looks like two vertical columns of figure 8's drifting past one another with a single line of cross-over points in the center of the pattern. This is the 99:2 pattern. It is not possible to count the loops because of the inability to stop the pattern and the large number of loops. Also the top and bottom of the pattern is so compressed that the individual loops of the pattern cannot be resolved. It is about twice as difficult to make this pattern stay still as the pattern first described.

As the oscillator is tuned to 2940 cycles another pattern as first described comes to rest. This is the 49:1 pattern. At 2910 a pattern similar to the second described pattern comes to rest. This is the 97:2 pattern. The first type of pattern repeats at every integral 60 cycle interval. The second type of pattern repeats every 60 cycles at the odd multiples of 30 cycles, or midway in frequency between the first order patterns.

Thus, there are easily obtained check points every 30 cycles through the audio spectrum of interest. As the frequency is reduced it is increasingly easier to obtain the patterns.

Between the more easily obtained first and second order Lissajous patterns described there are additional figures yielding intermediate check points. At the higher audio frequencies these are more difficult to bring to rest and to identify. However with an oscillator of good stability and slow tuning rate, such as a Hewlett-Packard Oscillator or RDJ Pulse Analyzer, they are perfectly usable up to and beyond 3000 cycles. The third order type of figure looks like two "cable knit" patterns moving past one each other with two vertical lines of cross-over points. The fourth order pattern appears as two "cable knit" patterns moving past each other with three vertical lines of cross-over points. As discussed above the higher order patterns are harder to "stop." The third order is about three times as difficult to stop as the first order. The fourth order patterns appear to move about four times as fast as the first order and it is accordingly about four times as hard to bring them to rest. Thus the higher order patterns are harder to stop and stability the Lissajous figure greater than the fourth order are too difficult to use at frequencies above a couple of kilocycles. At lower frequencies the fifth order patterns are usable. As noted above the point at which the higher order patterns become usable is dependent on oscillator tuning rate, oscillator short term stability and stability of the standard reference frequency.

Since 60 divided by 2, 3, 4, 5 and 6 yield integers the first, second, third, fourth, fifth and sixth order Lissajous patterns occur at integral frequencies (this is an advantage of the sextesimal system). The first order patterns appear at multiples of 60 cycles, the second order at multiples of 30 cycles (60:2), the third order at multiples of 20 cycles (60:3), the fourth order at multiples of 15 cycles (60:4), the fifth order at multiples of 12 cycles (60:5) and the sixth order at multiples of 10 cycles (60:6). The higher order Lissajous figures only appear at points not occupied by a figure of lower order. For example, at even multiples of 30 cycles only the first order patterns are seen. At odd multiples of 30 cycles only the second order patterns are seen. The first through the fourth order pattern appearances for the frequency interval from 2820 to 3120 are shown for illustration. It can be seen from the chart there is a maximum of 15 cycles and a minimum of 5 cycles between adjacent check points using the first through the fourth order patterns.

At the higher audio frequencies it is necessary to establish the identity of the first order check point to resolve any ambiguity due to inaccurate calibration of the audio signal generator dial or excessive space between dial markings. For instance, with a first order pattern on the scope and the dial at 3000 cycles on an oscillator of ±2% accuracy you cannot be certain whether you are looking at the 49:1, 50:1 or 51:1 pattern. With lower calibration accuracy the situation is, of course, worse. Fortunately the 60 cycle tone of WWV or WWVH can be readily used to establish a known starting point. With a 300 cycle signal from the audio signal generator into the horizontal input of the scope and the 600 cycle tone from WWVH into the vertical input in place of the 60 cycle reference signal, a 5:1 Lissajous figure should be seen. Substituting the 60 cycle reference source for the WWVH tone will now result in the 50:1 Lissajous pattern on the scope. A single tuned circuit resonated at 600 cycles will greatly assist in cleaning up the WWVH tone if the signal is noisy. An 0.8
microfarad capacitor across an 88 millihenry load coil will give a nice high Q tuned circuit at approximately 600 cycles. A 25K to 50K resistor should be placed between the receiver output and the tuned circuit. The connection to the scope vertical input is then made at the junction of the isolating resistor and the tuned circuit. Instead of the WWVH tone, the signal from a tuning fork oscillator or other fixed frequency oscillator of high precision could be used if available. However, WWVH signals are normally available and extremely accurate. Once a check point is determined, a fiducial mark can be placed on the signal generator dial to preclude having to go through the procedure every time measurements are made. The use of such a mark assumes the signal generator has reasonable long term frequency stability.

With the starting point known, it is thereafter only necessary to observe the oscilloscope and keep track of the Lissajous patterns as they come to rest as the audio signal generator tuning is changed. The scope should be used in this manner to read the frequency rather than the signal generator dial. A calibration correction curve or chart for the signal generator may be easily prepared using this method.

An example of the use of the above technique is the checking of a terminal unit tone filter for 2975 cycles. At 60 speed the minimum frequency bandwidth required to pass teletype pulses without distortion is approximately 50 cycles. Assume a design bandwidth of 100 cycles to allow for shift, other than 850 cycles shift, etc. A plot of the filter frequency response is desired to check center frequency, bandwidth and shape. The scope vertical input should be connected to a 60 cycle power line source of a volt or so and the vertical gain of the scope set near maximum. The audio signal generator should be connected to the horizontal input of the scope and through an isolating pad to the input of the filter under test. The output of the filter should be terminated in the proper resistance and an AC VTVM (or VTVM with RF probe) connected across the terminating resistance. This assumes the VTVM impedance is very high compared to the filter termination.

The signal generator should be set to 3000 cycles as outlined above. The output can be set for a convenient VTVM reading near full scale. This reading should be recorded. Tune the signal generator up in frequency observing the first and second order Lissajous patterns. The first second order pattern will be at 3030 cycles. The VTVM reading should be recorded. The next first order pattern will be at 3069 cycles. Again the VTVM reading should be recorded. Readings should be made up through the pass band of the filter. Repeat the process from 3000 cycles down through the filter pass band. If finer detail is desired near the center of the pass band, higher order Lissajous patterns can be used. The results of this point-by-point frequency measurement can be plotted on graph paper and a smooth curve drawn to show the filter response characteristics.

Another possible use of the calibration technique is for checking or adjusting a 125 cycle tuning fork standard. Examination discloses that no first through fifth order 60 cycle check point occurs at 125 cycles. However, a fourth order point does occur at 1275 cycles, whereas the 1275 and 425 have a 3:1 ratio and therefore these frequencies will yield a 3:1 first order Lissajous pattern. The 1275 cycle fourth order pattern occurs immediately after the 21:1 first order pattern at 1260 cycles. If the frequency of the oscillator under test is known to be of sufficient accuracy it can be used to easily spot the 21:1 check point at 1260 cycles. The 690 cycle WWVH tone can also be used to readily spot the 20:1 60 cycle check point at 1200 cycles. When the audio signal generator is accurately set to 1275 cycles and the fork standard signal is substituted for the 60 cycle signal a 3:1 Lissajous pattern should be observed if the fork oscillator is on frequency.

Use of the Lissajous figure frequency comparison method of calibration permits measurement accuracy of at least an order of magnitude better than normally possible with ordinarily available test equipment.
SEVENTH SWEEPSTAKES

The Seventh Anniversary RTTY Sweepstakes contest will be held February 12, starting at Six PM, EST. Running thru Three AM EST the 14th. This will be 33 hours of operating time, also a slight change in the times due to the many letters received.

LISSAJOUS PATTERN APPEARANCES
FIRST THROUGH FOURTH ORDER
FREQUENCY INTERVAL 2820-3120 CYCLES

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Rules are the same as in the past. Stations will exchange messages consisting of message number, station call, ARRL section of station, check or BST; time (0000-2400 Preferred), date and band used. One point for each message transmitted by RTTY and acknowledged by RTTY. One point for each message received by RTTY only. The total points multiplied by the number of ARRL sections or countries counted for DXCC credit, gives the score. The same stations may be worked on different bands for additional points but the section multiplier does not increase. Logs should be mailed to RTTY, INC, not later than the 20th of February to be included in results.

This contest will enable many of the newer stations to work additional stations and provide an excellent opportunity for DX contacts. Frequencies to watch are 3620, 7090, 7140, 14090, 14340, 21015, 21090 kc. Note that VEIs, GS, ZLS, and VKs operate below our normal 7140 and 14340 frequencies at 7090 and 14090. There should be a good chance to make WAC RTTY during the SS contest since England, Africa, South America, as well as Australia will be on for sure and Okinawa too. See you during the contest.

Subscription Rate $2.75 Per Year
RTTY is the Official Publication of the RTTY Society of Southern California and is published for the benefit of all RTTY Amateurs and Experimenters.

For Information Regarding the Society Contact the Following:
W6AEE — Merrill Swan
W6SCQ — Lewis Rogerson
W6FZ — Wayne Wihl
For Traffic Net Information:
W5FLW — W6JZ
For "RTTY" Information:
W6DEO — W6AEE

BRITISH AMATEUR RADIO TELETYPE GROUP
NEWS SHEET NO. 4
NOVEMBER, 1959

As we suggested in our last News Sheet, this issue contains news of the first RTTY QSO's to take place in the British Isles.

On 25th September last, at 1330 hrs B.S.T., G3CQE received G3COE's RTTY signals transmitted from Norwich. Parts of the tape showed solid copy and for a first attempt the results were very encouraging indeed. Transmission was on 3.6 Mc/s with 850 c/s FSK. During the next week or so, two tests were carried out between G3CQE and G2UK, some quite good two-way QSO's being achieved. G3IAO also had some receiving gear working and he was able to copy G2UK solid.

During the weeks that followed, G3COE got on at 21 Mc/s and made the first VE/VE RTTY QSO—with VE7KX, which is as it should be—and the first G/W QSO's. By now Bill has worked so many stations "on the other side of the pond" that we have quite lost track of what he has done! Very nice work, Bill, and congratulations on getting British RTTY on the DX map so quickly.

Since all this excitement, things have settled down a bit. G3COE working DX on 21 Mc/s whenever conditions are suitable and G2UK putting out test transmissions most lunch hours on 3.6 Mc/s. Some nice copy has been received from G3BST and G2UK, some quite good two-way QSO's being achieved. G3IAO also had some receiving gear working and he was able to copy G2UK solid.

As we suggested in our last News Sheet, this issue contains news of the first RTTY QSO's to take place in the British Isles.

As we suggested in our last News Sheet, this issue contains news of the first RTTY QSO's to take place in the British Isles. A statement based on the information set out in the letter will appear in an early issue of the Bulletin.

"I have been instructed by the Council to advise you that the Society will raise no objection to the use of U.K. amateurs of the system known as radio teletype provided the system is not used in the band 1800-2000 kc.s.

"The Council note that the G.P.O. is prepared to authorize individual amateurs to use this system of transmission and that the position will be reviewed in the light of twelve months experience.

"The Council notes with satisfaction that the G.P.O. will place emphasis on the transmission of call-signs in plain language on at least the occasions stipulated in the license.

Since writing the above paragraph, the appropriate number of the Bulletin has appeared, in which the above information is given in resume form.

In the absence of any further information, we suggest that those amateurs proposing to transmit RTTY should write to the G.P.O., informing them of their proposed activity and giving the frequencies on which they intend operating, together with brief details of the transmitting gear, and also mentioning that they are members of the BART. If members like to send these particulars to the Hon. Sec., he will see that they are forwarded to the appropriate G.P.O. branch.

Radio Hobbies Exhibition

The Group Stand at this exhibition will be adjacent to that occupied by Data Publications Ltd. (Stand 24). Your Hon. Sec. hopes to be on duty most of the time and will be very pleased to meet as many members of the Group as possible—so please make a point of asking for him.

Membership of the Group reached a total of 59 on 31-10-59.

MAILBAG

Your Hon. Sec.'s mailbag has been pretty heavy these past few weeks. He has tried to answer each letter individually but if anyone has been left out—humble apolo-
of your group in the September 1939 "RTTY Handbook and any member requiring same, please let the Hon. Sec. know."

Dear Arthur,

Hon. Secretary,

RTTY Handbook

An excellent letter from Bruce Rowlings ZLIWB, has found the following books in his Public Library, all of which deal with RTTY. "Elementary Telegraphy," E. Missier, Newnes @ 12/6d. "Modern Telegraphy Systems & Equipment," W. T. Perkins, Newnes @ 10/6d. "Telegraphy," Freebody, Pitman @ 80/-d. Your Hon. Sec., has obtained a copy of the first mentioned, it has an excellent description of the Type 3 T/P, and is thoroughly recommended. Should be on every RTTYer's bookshelf.

Adrian Smallbone, Poynt, has a terminal unit going and has been able to work a radio made high speed tape inker from it. It is of the type described by W2BED in the RTTY Handbook.

James Hepburn, VE7KX, the founder of BARTG, we might almost say, continues to do a good job. His idea of a good job.) Cas says he expects to be on the air with CW very shortly, and we can do something about getting some mail on the 14 and 21 Mks bands.

Finally, we reproduce on page 4 a very nice letter from Bruce Rowlings ZLIWB, sending to the Group greetings from the RTTY gang "down under."

**RTTY Handbook**

We may have a few more copies of this Handbook and any member requiring same, please enclose 6d to cover postage.

**QTH ZLIWB.** September 17th, 1959.

Hon. Secretary,

British Amateur Radio Teletype Group,
Suffolk.

Dear Arthur,

Greetings to B.A.R.T.G., from "Down Under." I was delighted to read the annual report of your group in the September 1939 "RTTY" which arrived here today. For some time I have read, heard, and written a deal on the subject of amateur teletype in the U.K. and I am sure you will be pleased that efforts by Jim, VE7KX, and others, have brought into being the group that you represent. I hope that this facet of our hobby will grow into a strong section of the amateur community in England, and I trust that those who have been "scatttering" experiments with RTTY will quickly adopt a more favorable and reasonable attitude. Here in New Zealand we have successfully neutralised opposition to our ham teletype, and I know, that in the course of time, a similar condition will prevail for you.

Our latest allocations for frequency shift keying are as follows:

- Zero to 855 cycles shift:
  - 3500 to 3530 kc/s
- 1000 to 1410 kc/s
- 2500 to 2610 kc/s
- 7200 to 7951 kc/s
- 21000 to 21190 kc/s

In addition to your DX list, AFSK may be employed without restriction.

Power limitation. 100 watts modulate rating.

Stations possessing RTTY equipment:

- ZLIAHO, Ron Sykes, Papakura, Auckland.
- ZL1AKW, Milton McFarlane, Papakura, Auckland, Model 14/TD
- ZL3HJ, Alec Hysom, Kupangi RD, Catlins, Model 26
- ZL1WB, Bruce Rowlings, Onahui, Whanganui, Model 15, 14 & 14/TD
- ZL1MJ, Bruce Rowlings, Onahui, Whanganui, Model 15, 14 & 14/TD
- ZL1MJ, Bruce Rowlings, Onahui, Whanganui, Model 15, 14 & 14/TD
- ZL1MJ, Bruce Rowlings, Onahui, Whanganui, Model 15, 14 & 14/TD
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Regarding the following books to be read about RTTY:

- "Modern Telegraphy Systems & Equipment" by W. T. Perkins, Newnes @ 10/6d.
- "Telegraphy" by Freebody, Pitman @ 80/-d.
- "Elementary Telegraphy" by E. Missier, Newnes @ 12/6d.

The holidays are over, the bands are beginning to settle down to more stable conditions and DX is really starting to roll in again. That seems to sum up the reports filtering into this nerve center from the DX-minted RTTY gang during the past couple of weeks. The U.K. boys seem to have his printer at the close of the year—he says the bands has not been open to W for him for some time—he thinks it will be January before it opens again. Meanwhile am skedding him every day that I am home—1230 GMT to be exact. We usually make it 5.5 pks." Bill points out the path to VK3KF is 10,630 miles from his QTH.

A new one just making his RTTY debut on the bands from the British Isles is G3KSS. He is located on the outer Hebridean Islands off the coast of GM. He reports to have specific times and frequencies on this one in next month's blurb. Generally, given a listen—be on the air with CTY for the DX list.

G2UK has been putting out regular daily transmission on 3.5 Mks. He reports he has received some nice reports on his copy. Speaking of 3.5 Mks—Skipper, W2RUI, is arranging a series of skeds with Bill, G3CQE, for some time next month. Bill says he will be a welcome addition to your DX list.

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time this column is published, George Stark- key, OA5G, should be actively giving out South American Contacts to the gang. To quote from Walt's letter to Merrill: "George, OA5G, is the head maintenance man for the Marcona Mining Company in San Juan, Peru. They mine iron ore and ship it in their own ships to the United States as well as to several European countries and Japan. They employ about 1500 people down there and the mine is 17 miles from the loading dock which is a power driven chain affair that extends way out into the bay—it is very dry and there is no vegetation. There are two parts of town all company owned. One for the Peruvian workers and one for the Peruvian and American executives—George has the model 26 we sent him and has the "Mu-Western" terminal unit and has been copying—George said that he was ready to be on the air within 24 hours upon receipt of the FSK unit that Mace built for him. Down there the news is hard to come by and he has been running a bulletin board with newscasts from the States as well as Japan and there is much interest in the more up to date news than they get in their delayed papers. George is about 49 years old, big as a barn and as nice as anyone could be—he is going on an expedition to the Galapagos soon. I hope we can get him to take some RTTY gear with him. I would like to be able to say I have worked the Galapagos Islands on RTTY. (Ed. Note: Amen—to that last statement, Walt) So let's all bug him a little. OA4GM is furnishing the Yacht and they have plenty of power etc., so let's get George to take RTTY along. Thanks, Walt, for a most interesting story on OA5G. I'm sure he will get plenty of pressure from the RTTY gang regarding that expedition to the Galapagos.

Due to the fact that the deadline for this issue came before the last issue had been delivered to everyone there were only a few entries in the DX RTTY countries worked box score. Hope by this time next month a lot of you will find time to check your logs and QSL cards and send us the result. Please send us any DX scoop or rumors that you happen to run across. This column has to depend on its readers for support—so help! help! The address is 5226 Willmonte, Temple City, Calif. Happy hunting and 73.

Bud W6CG

RTTY DX BOX SCORE
(Countries worked on 2-way RTTY)
W6AEE .................................. 13
W6CG ..................................... 13
K6OWQ .................................. 12
V7TKX .................................. 11
KL7NZ .................................. 9
KL7ALZ .................................. 8

Continued from Page 10

but requires adjustment. Has anyone any information, manuals, etc., for these machines?

Messrs Peter Seymour, 410 Beverly Road, Hull, are able to supply a unit, which at the price they are asking, should interest members. At £3-10-0d., these TC-sets will provide a useful variable voltage d.c. power supply suitable for the T/P motor. Besides many other components, such as switches, capacitors and a centre-zero 40-0-40 mA meter, these units contain a power supply using an autotransformer with a wide range of inputs and outputs. Primarily designed for inputs of 115 or 230V a.c., a variable voltage output in the range 100 to 120V d.c. at 0.5A can be obtained by means of stud switches.

STOP PRESS...

We have just received a letter from the G.P.O., clarifying the procedure for those proposing to transmit RTTY. A letter should be sent to:— G.P.O., Radio Services Dept., Headquarters Buildings, St. Martin's-le-Grand, London E.C.1., asking for authorisation to use RTTY. This will then be sent to amateurs, in the form of a letter, which should be attached to their licence. Authorisation will be for all bands for which emission F1 is already officially allowed, except for the 1.8–2 MHz shared band. Recognised International RTTY codes must be used and the call sign must be sent in plain language on at least the occasions stipulated in the licence.

Someone has a copy of "The Teletype Story." Would he please return it as soon as possible.

That is all for this month—see you at the Exhibition! —0—

G2UK
Enclosed are snap shots of Ed Green, 4422 Marquette Dr., Fort Wayne, Ind., Oct. 60 K9DAS, winner of the Chi-RTTY model 28 printer which our group walked away with. Incidentally, he has it on the air. It’s not sitting in a corner gathering dust. Ed, K9DAS is City Engineer for the City of Fort Wayne and formerly was construction engineer for the Nickle Plate Railroad.

Also enclosed are snap shots of my station. Hope to have some more coming through shortly. We are finally selling the local group on RTTY. We now have K9YDPU on forty RTTY and W9FRU of Decatur, Ill., abt 20 miles south of Fort Wayne on 40 RTTY as well as Ed and myself. Of course we have several on twenty meters that get on and then.

I also have included my log and did much better this year. Guess I had more time available. One of the contacts was one way only and am not sure how to figure the score as VE2HY acknowledged my message but I lost him in the QRM before he even got started.

Man, speaking of QRM, I never knew there were that many active RTTYers in the country. Seems like we are missing the boat by piling up all in about 20 kc. How about starting at 7100 kc and assigning 7100 to 7110 to call district No. one, 7110 to 7120 to call district No. two, 7120 to 7130 to call district No. three, etc. Then we could have WAS with much less interference. This would be for the contest only but why pile up. Maybe some one else has a better idea but it sure should be given some consideration.

Incidentally, where were you? Probably buried under the QRM.

Just one more quickie and then I will sign. Obtained one of Ben’s (W9UE) Automatics for my model 26 to get automatic carriage return and line shift. Boy does it work swell. So the other day I am working a W4 who is using a model fourteen tape reader and he doesn’t have an end of the line indicator so he is having trouble wondering when he is going off the end of the paper and getting in line shift. I advise him to disregard as I have the new gadget from Ben and my machine will put in what he leaves out. So we talk for a good half hour with perfect copy as far as we are concerned. When I signed with him who should call me but Ben himself W9JFB. Seems that Ben has been sitting there pulling his hair wondering what has happened to his Kleinschmidt. No carriage return or line shift coming through and he thinks it is on his end. So after I explain it to him he was much relieved to find that it wasn’t necessary to rebuild his gear. Seems like the old misfit got caught in his own net.

Mel Hart—W01BZ president
Larry Ameling—W9NOY Vice president
Elmer Ford—W9UFH secretary
Noble Redman—W9FRX treasurer

Such subjects as, where to meet, social events, how often to meet and others were discussed but no definite decision reached as yet.

Those in attendance were:
Robert A. Teutner, WODIA, A. T. Corbin, W5XN; C. E. Donaldson, W0WZA; R. Bartell, K0DR; John Davidson, W0ZK; Tom Bush, K0LLC; Paul E. Meyler, K0DOK; Ernie Wyle, W0YRN; Stan Birtfeld, W0GUG; Carl Moxley, WOFQY; Noble Redman, W9FRX; Bob Fenton, W0QPP; Gene Bell, K0BVM; Joe Beene; Elmer Ford, W0UFH; Larry Ameling, W9NOY; Mel Hart, W01BZ.

Hope you will pardon the typing and will give you more information on the progress of the S-L-A-T-S as it progresses. Best 73,

Elmer Ford