RTTY



W3KYR-BOYS CLUB of ST. MARY'S, INC.

OF

NEWS FEBRUARY, 1955

25 Cents Vol. 3, No. 2

AMATEUR

RTTY



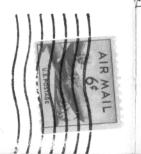
TRADES

WANTED —Tape Perferator and Tape Keyer Robert W. Muler, 2100 Demster St., Evanston, Ill.

WANTED FOR SALE—Model 15 Bases and Keyboards TRADE—Model 25 FOR SALE FOR SALE FOR SALE-FOR SALE—MG Set for Model 12 TRADE-110VDC, 500 Ma. power supply. Will take tape head FOR SALE—Model 12 Printer Only .. TRADE—Model 26 Complete with Table FOR SALE-Model 24 (similar to 26) FOR SALE—Model 26. Model 12 Printer Cover only for non-typing 14 reperf -Model 12 Complete, Model 12 Table -Model 12 and Model 26 Model 14 and Model 12 Broken Casting Distributor WØNME W2EHW W2EHW W6PNW W7HPH W6ZNU W6KGS W4LCR W8BYB W60QB W6EV

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

Return Postage Guaran 3769 East Green Str Pasadena 10, Calif Inc. FEB 17



W3KYR—BOYS CLUB of ST. MARY'S, INC.

By FREDRICK WISE, W3LGK, Opr.-St. Marys, Pa.

TRANSMITTER

90 watts input to a 6146. 80 meter clapp oscillator VFO using a 6J5 with a 6AG7 isolation stage, followed by gang-tuned bandswitched 6AQ5 multipliers for operation on 80, 40, 20, 15 and 10 meters. A national panel dial is used for VFO logging in conjunction with a calibrated drum dial. One section of a 6J6 is used as a diode modulator per W9TCJ's article in CQ April 1952. Incidently, unstable operation was encountered with this circuit until R3 in the schematic was replaced with a 2.5 MH RF choke. Plug-in coils are used in the 6146 plate circuit as lack of space prevented use of a PI or bandswitching tank. Meter switching and excitation control for the final are included as well as clamp protection while on CW and clamp modulation for phone work. The entire transmitter, complete with separate high and low voltage power supplies, is constructed on a standard 17" x 13" x 3" chassis and 8%" relay rack panel and is TVI filtered and shielded. A homemade low pass filter is used in the output link circuit. This transmitter may be seen in the photo directly below the meter panel on the rack cabinet. A 300 watt final amplifier using PP T40's may be seen directly above the meter panel. This amplifier is not being used at present due to TVI difficulties as it is not filtered or shielded.

RECEIVER

A BC-348-P with no modifications,

other than the conventional conversion, is being used.

ANTENNA

The antenna for all RTTY work up until the time this article was written (latter part of December) has been an indoor 80 meter folded dipole strung up in a third floor room which at one time was the club gymnasium. Both ends of the antenna were folded in shape of a "U" in order to get the full length up. Two new antennas—a 40 meter end fed zepp and an 80 meter end fed long wire —we are ready to erect as soon as weather permits and both should be in use at the time this article is in print.

TERMINAL UNIT

A composite unit using a front end identical to that described by W9TCJ in his article "little gems" which appeared in RTTY April 1953 up to, and including, the 6H6 rectifiers and "magic eve" tuning indicators. This is then followed by a DC amplifier polar relay circuit using 6V6's. A "normal-reverse" switch as well as a "mark-both-space" monitor are incorporated in the circuit. The polar relay circuit now being used is that suggested by W60WP on page 25 fig. 4 of QST August 1953. The printer magnet is keyed by the polar relav contacts—operating current for the magnet is taken from the regulated 105 volt power supply section through a current limiting resistor. No audio oscillator is necessary in this setup. In the above-

mentioned W60WP polar relay circuit. the model 26 selector magnet (with coils in series for 20 MA, operation) was first used by inserting it in the mark DC amplifier plate circuit, in order to obtain local copy (monitoring) as well as offthe-air copy. But, due to the inductive kick from the selector magnet, the space signal was modulated, when transmitting FSK, in a manner frowned upon by the FCC. This condition was rectified by isolating the printer magnet from the rest of the circuit by keving it with the polar relay contacts as mentioned above. Various values of resistors were shunted across the magnet coils to damp the inductive kick but regardless of the values used (within reason) modulation still existed. Results with this setup are not 100 percent satisfactory and future plans are to change the polar relay portion over to the "Gates" system as described in RTTY October 1954. The terminal unit may be seen in the photo on the shelf immediately above the BC-348 receiver.

TELETYPE PRINTER

A model 26 printer is being used. This printer was obtained through the RTTY Society of Southern California after a waiting period of almost a year. A note of interest for any east coast amateur who may be considering ordering a printer from RTTY is that motor freight shipping charges amounted to \$15.14 for the printer only (no table). No future plans have been made for tape gear or additional RTTY equipment.

FREQUENCY SHIFT INDICATOR

Measurement of the transmitter VFO frequency shift deviation is made by using the "magic-eyes" in the terminal

unit. Deviation is 850 cycles when the mark or space eye closes completely as the frequency is shifted by the manual FSK switch.

OTHER EQUIPMENT

The "Black Box" to the right of the terminal unit is homemade 6 and 10 meter receiving converter. A 100 KC crystal frequency standard with a 10 KC multivibrator sets to the left of the TU and a command receiver (used as a CW monitor) sets to the left of the frequency standard. Directly behind the printer may be seen an RME-69 receiver with speaker and a BC-221-AH frequency meter.

PHOTOGRAPH

The flash photograph of the station was taken with a very low-priced Eastman 2¼" x 2¼" box camera and was enlarged to 8" x 10" for reproduction purposes. This should show enough detail to allow the gang to get a rough idea of the station equipment.

All radio and RTTY equipment seen in the cover photo, with the exception of the BC-348 receiver, is the personal property of Frederick Wise W3LGK. Also, the transmitter, 6 and 10 meter converter, RTTY terminal unit, and 100 KC frequency standard were constructed by him. Permission has been granted Fred. by Mr. Henry J. Brock, W3NDE, executive director of the club, to use the facilities of the club in order to keep the amateur station active. The St. Mary's Boys' Club, by the way, was the first club in the Federation of Boys' Clubs to own and maintain an amateur radio station and is now THE FIRST EQUIP-PED WITH RTTY.

RTTY

By R. H. WEITBRECHT, W9TCJ, Williams Bay, Wisc.

A model 26 machine was received by the writer and immediately placed into service at W9TCJ last winter. Over an initial period of several months the equipment developed trouble in both the typing unit and the keyboard to the extent of causing strike-overs, double pulsing, and misprints. The causes of all these troubles have been found and corrected, and the details follow.

THE TYPING UNIT

In the typing unit there is a vertical shaft in the rear; this has the typewheel on its top end and connected thereto is a "stop-arm" lever which swings over the stop-pins cage. One stop-pin, when selected, stops this lever and positions the typewheel for typing the selected pallet onto the paper. The shaft does not rotate continuously, it only rotates over different angles for successive characters. The other end of this "typewheel shaft", down near the bottom, has a clutch containing two felt washers pressedgether against both sides of a fiber driving gear, as shown in Figure 1. The gear rotates all the time being driven by the motor, and the clutch thus "slips" when the typewheel shaft is not rotating.

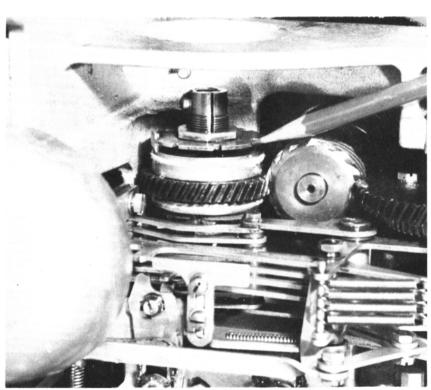


Fig. 1—Typewheel Clutch

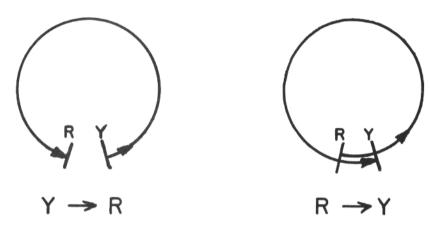


Fig. 2—Typewheel Positions for YR and RY

Thus it is of great importance that this clutch be working properly or else it will give trouble.

Figure 1 shows a pencil pointing out the capstan (notched) nut. This nut forces a special spring onto the whole of the clutch assembly, thus placing a frictional tension in it. Now, suppose this spring tension is weak. This will cause an inertial lag in the rotation of the typewheel shaft to its next selected stoppin. In other words, the shaft will be slow in picking up rotational speed.

There are certain character-pair combinations on the typewheel where nearly full-rotations of the typewheel shaft are required to select either of these two immediately adjacent pallets. Examples are the RY and YR combinations. As shown in Figure 2, signal transmission of Y and then R will cause a selection and typing of Y, and then the shaft rotates almost one complete turn to the R stoppin, and the R pallet is next struck. On typing for Y, next, the shaft turns just a bit more than full-turn to the Y stoppin. There, if the typewheel shaft is

slow in picking up rotational speed, the subsequent operating cycle of the typing unit will hit some other pallet against the paper, rather than the desired one. This results in "strike-overs", near misses, and misprinting.

The obvious remedy is to tighten up on the clutch tension. This is easily done by loosening the small jam-nut bearing against the capstan nut, and rotating the latter one or two notches to the right to increase the spring tension. Afterwards the jam-nut is tightened up. One or two notches should be plenty, and more places an unnecessarily tight tension upon the clutch felts. During this clutch adjustment the shaft should be supported so that its stop-arm lever does not bear against any stop-pin while the nuts are being loosened or tightened. The typewheel clutch should now be tight enough for proper action. The two felts must be kept supplied with oil, as will be referred to in lubrication hints.

THE KEYBOARD

Occasionally the striking of one key on the keyboard caused the printer to perform two operating cycles. The first cycle would result in the typing of the desired character, and the next cycle consisted of a "LTRS" selection. Investigation of the transmitting cam system showed it to be operating properly, performing one revolution, and no more, for each key operation. An oscilloscope was hooked up to the output of the keyboard, with a battery in series, and the waveforms were inspected. Severe contact bounce or chatter was observed, thus multilating the individual "bauds" (properly "units") of the signal. Especally the cause of the double-pulsing of the printer was traced to the bouncing sixth-pulse contact; it then setting up a short "false start-pulse" at the end of the previous keved signal cycle.

The remedy, and an effective one, consists of placing an "anti-chatter backstop"* against the row of stationary contacts on the transmitting cam assembly. This is shown in Figure 3, with pencil pointing to the back-stop. It is a great aid in dampening out the vibrations in the "stationary" contacts.

It is easy and simple to make up one from a piece of tin, a piece of cardboard, and some Scotch No. 33 tape. The carboard is placed under the tape for a cushioning effect against the backs of the stationary contacts. The tin is bent as required so that the cushioned surface rests solidly against all of the

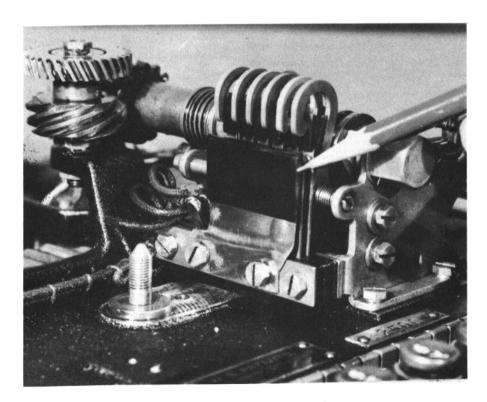


Fig. 3—"Anti-Chatter Back-Stop"

six contacts. Holes were drilled in the tin in such places for the two machinescrews to hold it on the overall assembly.

Several years ago this same treatment was given another Model 26 keyboard which had been mechanically modified to fit on a Model 12 machine setup. Both keyboards now generate clean teleprinter signals, free from chatter, and have been operating properly ever since these "backstops" were installed. Several other Model 26 owners had the same trouble and the same curative treatment was applied with complete satisfaction reported.

*This term by courtesy W9GRW who states that such items are used by Teletype repairmen.

SOME LUBRICATION POINTS

Some hints will be given only briefly and reference is made to the Model 26 maintenance manuals for the other lubrication points.

The four felts-two on the typewheel shaft clutch and two on the middle shaft, right in the selector unit-must be kept well oiled for proper action. Just pry apart the clutch with a screwdriver blade, and squirt in some oil to saturate each felt. Once a month seems sufficient unless the printer is in really constant use, and then possibly more frequent lubrication will be needed.

In oiling the selector unit felts, and for that matter, the whole unit itself. care must be taken not to allow oil upon the selector magnet armature. Any oil on it causes it to stick to the magnet pole-pieces by molecular adhesion and thus upsets the selector timing, with obviously unfortunate printing results.

Should this occur, it is necessary to clean up the armature and the magnet polepieces, and this can be done by wiping them with blotter paper placed between magnet and armature.

CONCLUSION

This covers all the troubles the writer had with his model 26 and all the causes were corrected early last year. The machine has been turning out errorless copy for many months now, with good signals applied thereto, of course.

DON'T FORGET THE

2nd Annual Anniversary

SWEEPSTAKES

ON

FEBRUARY 20th

A REGULAR RTTY **MEETING** WILL BE HELD ON **FEBRUARY 26 MICHILLINDA** WOMEN'S CLUBHOUSE

ON ROSEMEAD BLVD.

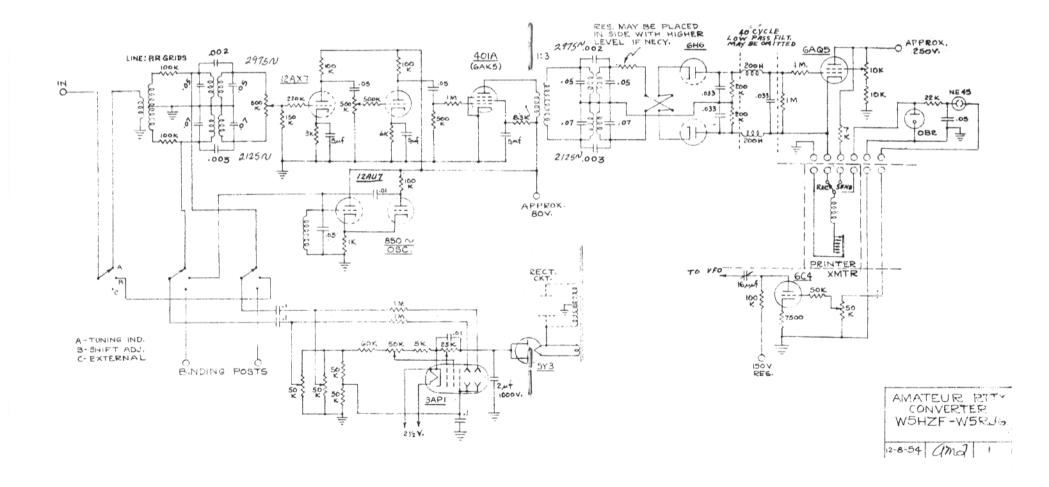
PASADENA, CALIF.

W5HZF-W5RJG RTTY CONVERTER

MARVIN H. HART, W5HZF Fort Worth, Texas ARLAN M. TATE, W5RJG Dallas', Texas

Here is the diagram of the converter which Arlan and I worked out. Believe there is room for improvement from the standpoint of selective fading. Have been thinking of including the Gates circuit, from the output of the discriminator transformer on through the output tube. The values shown for the tuned circuits give a band-pass that is a good compromise. My tuned circuits use larger capacitors, .2 and .15 mfd. to get narrower response, and I have a five position switch with taps on the coils in both the input and discriminator filters (on

the high tone only) to take care of the signals that do not have the correct shift. The tapped portions of the coil consist of five turns between each switch point. The capacitors remain the same. Of course you could change them instead of the tapped coils.

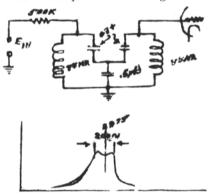


RTTY Surplus Filters—C-114 Loading Coils

By LEROY NELSON, W7GHW

Recently the Puget Sound RTTY Society as well as the RTTY Society of Southern California was fortunate enough to obtain some five hundred of these coils. RTTY is selling theirs at twenty cents a coil plus postage. They can also be obtained from Harold Wade W7HRC in Seattle.

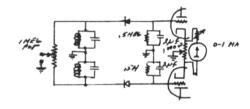
According to *Terman the valley can be neatly filled in, where the coupling is so tight that a very pronounced double humped curve results, by adding a third tuned circuit having half the Q of the over coupled circuits. I have been wanting to try a circuit of that type but wanting to is as far as it has gotten. My receiver drifts quite a bit during its warm



up period so I figure I needed a couple of hundred cycles leeway. These overcoupled tuned circuit band pass filters sort of violate a few of the principles laid down by Gates in the October 1954 issue of RTTY. However the important requirements are adequately filled I think. The resistance between the driving source and the primary tuned circuit of the overcoupled pair lowers the Q of the tuned circuit. Consequently this resistance should be kept pretty large to avoid reducing the Q of the circuit excessively.

The problem of receiver drift brought up another possible use for a couple of the loading coil toroids, I started mocking up a circuit for an audio discriminator and got far enough along so that it looked like it might have some promise of a workable device. Driving it from an audio oscillator, it worked fine. It would probably be well to add a limiter in the circuit for actual operation. It uses a couple of semi-conductor diodes in place of vacuum tube diodes to get away from contact potential troubles. Using a 6SN7 as the VTVM and a zero center one half mil meter (.5-0.5 mils) I could peg the meter when only 25 cycles off of the center frequency. By tuning the two tuned circuits of the circuit to give a response about as wide as the flat top of the band pass filter the meter will indicate how far off tune the receiver is in relation to the center frequency and how close to the edge of the filter band pass the signal is. By making the DC filters in the grid circuits of the VTVM have a long time constant the meter will continue to indicate during keying.

The C-114 coils have a one to one primary to secondary, with 22 milhys each. Or 88 milhys with the two windings series aiding. The DC resistance is approximately nine ohms. As received these C-114 coils have a hinged case on them, which can be removed by taking out a few 6-32 screws, and then soaking the portion with the coil in tri-chloral ethelyene, or the so called degreasing solutions.



RTTY will welcome any additional comments or suggestion relating to use of these fine toroids. Ed.

*Termans Radio Engineering Handbook. McGraw Hill Co.

RTTY COMMENTS BY A FRIEND OF THE "OLD MAN"

"Look, son, don't feel discouraged if that kid up the street with the rotten key-clicks is giving you a bad time. Fight back! Get on RTTY and show him what real QRM is! It's really not as tough getting on radio teletype as it might look to you. Now, you just listen while the old man bends your ear with some sage advice."

"In the first place don't pay any attention when the CW joy boys tell you that RTTY and CW aren't compatible on the same band. That's the same tune the fone boys are singing to the SSB gang. Most of the sour notes come from the same fellers who printed "Spark Forever" in big red letters across the top of their QSL cards back in 1923.

Remember, son, you're sort of a pioneer when you go RTTY and pioneers in every field always have plently of opposition."

"Nice thing about RTTY is that you can use the same lash-up that you have in your shack now. That 304TL will cut feeding with the lamp cord. Course it won't help your TVI any but at least it will give that herringbone pattern on old man Applegate's TV screen that "new look". He'll probably welcome the change, too."

"And another thing, son, you won't have any trouble putting FSK on that signal drifter you're using. Of course it's a bit wobbly but if the other guy has trouble printing your copy he'll suspect his own receiver or converter. (They always do)—so what have you got to lose?"

"And stop worrying about the printer, son. They're a cinch to keep in adjustment .The fancy boys use ram scales,

spanners, feeler gauges and the like but this is just to build up their ego. Actually all you need is a pair of gas pliers, a big screwdriver, and an oil can. If you can keep that '39 Plymouth of yours running you won't have any trouble with your model 26, believe me.

"As far as typing goes; you haven't any problem either, son, very few of the gang can type and practically none of 'em can spell so you're in like a burglar. After you've been on teletype for a month, you'll see so many new spellings for words that you will be able to qualify as the "scrabble" champ of the county."

"Another thing to remember, son, is to always acknowledge the other fellers transmission with; "solid-land line copy" even if it looks like a Greek market report. This impresses him with the high quality of your terminal gear and tags you as a solid citizen."

"I know how much you like contests, son, and RTTY really has 'em. The RTTY sweepstakes is a contest to end all contests! If you've never heard five or six FSK signals grinding out tape on the same frequency at the same time, you just haven't lived! It's the biggest noise ever made on any ham band at any time—and that goes for field day, too!" When you hear it, it will make you swell up with pride just because you are a part of such a stupendous spectacle.

"Oh say, son, by the way—if you really want to be considered a non conformist, a sort of "ham radio leftist" try RTTY—SSB. This will leave you as devoid of friends as an Eskimo in the Sahara Desert. Just a crazy mixed up kid!"



"Have been assigned here at the MARS station as maintenance chief which is a good deal and am happy to be here. This is a ham's dream here we really have a beautiful set up here which consists of a Army equivalent of a Model 19, a Model 15, and a Model 14 Teletype machine. A super Pro receiver, a dual diversity FSK converter, and a FSK keyer which is a pretty old job and gives troubles. The transmitter is a BC 610. How about getting it on the amateur RTTY Freqs? Ed."

-Chucky W2DWU

RYRYRYRYRYRY

"Have only one criticism to offer—far too many of the guys use the contest as a chance to "ham"—leaving the others who were after contacts to hang on the ropes in utter frustration! I noted that amateur radio's model ham station was among the worst offenders. Otherwise no gripe—it was well handled, conceived, etc., and we in Detroit wish all of you at RTTY the best for your efforts."

-73 Walt W8HP

RYRYRYRYRY

"In connection with "RTTY Operating Comments" in Sept. issue, I suppose I could qualify for most of Sam Droopels shortcomings with one exception. To twist a phrase I could say that the "Road

of good intentions leads away from perdition" for one terminal in good working order was constructed as evidence of my good intentions. However various obstacles including a full work schedule 6 and 7 days a week plus extra assignments as Telegraph Opr at W.U. almost make it impossible to do anything for 7 months of the year."

-73 Robert W. Kelting W8ATN

RYRYRYRYRY

"Well I am now the proud possessor of a Model 26 Teleprinter and am very grateful to you and your association for making it possible. However, I am still confused as to what to do now. I know absolutely nothing about the theory of operation of Teletype, all I have is the desire to get the thing working. Is there any literature that takes the beginner (and I do mean beginner) thru the exact steps of necessary construction. Very truly yours."

-Ernest Melmon K6DOF

(Any of the S.F. boys wishing to help Ernest get going? Ed.)

RYRYRYRYRYRY

... Incidently that was some contest! I had a great time. Nip and tuck with Phil till time he thinks he beat me by one contact and one section. Next time I am going to try to wallop him. Just good clean fun! W6AEE de W2BDI AR K.



mile apart and I also am getting a very strong signal from you. Get a 28 microamp reading on your sig and that is all I get from our good friend Walt and he only lives about two miles at the most from me. Well Rod guess I will go upstairs now and soak for awhile. Bet I will feel a lot better for it NJ. Hi Hi. Fine on you and the XYL watching the TV and do hope you have a good movie to watch 73's for now and will see you later W8BYB de W8BL Detroit Michigan. AR

* * * *

... W6LGO de W6KMT OK, Ward. Well I got back, and thot I might as well let you know that I survived the trip on the road. It is getting real foggy on top of the smog. Fine deal. Perhaps that will curb some of the travel and maybe we won't have so many people out driving on their way to the bastille. On the window. Well my boy is getting a bit large for window breaking. If he does he will fix it himself, by golly! I'll get back to the heath kit and see if I can put in a few more wires. Would like to get it going this week end if possible, but there are many breaks, and I seem to be unable to leave the RTTY alone. 73, Merry Christmas and I'll BCNU later. W6LGO de W6KMT SK and stuff.

... Will be home here at WØBP for about ten days then back to W9BP.

... W6NCP de W6ZBV OK and fine job there Beck. The over print work helps a lot. Will have to try it myself next year. Thanks for the kind remarks on my card. I cheated a bit and had the reperf on during the jingle bells so it should make my job a bit easier tomorrow. Well, we have company in the house and I see from the log that I have been down here for a solid hour and a half so I guess I am a pretty poor host! So guess I had better get up and see if anyone is still awake and speaking to me Hi. Thanks again for the card and the dope. Will be looking for you over the weekend. So a Merry Christmas to you and the family and will be seeing you around. W6NCP de W6ZBV. 73 and GN Beck.

* * * *

. . . Really the darn thing works like land line. Perfect copy and all that kind of stuff. The guys on the frequency now are W8UKK Allen Park, W8GLS Lathrup Village, W8KFA at Mmnica ND the six mile road in Detroit. W8HP at where you know. And W8ZM and W8BL in the lower Southeast part of Detroit. Eddie Atems W8CLL and W8UMI are expected almost anytime. So the situation really looks good for Detroit net on two meters. There are also three other machines on this side of town who will be on two meters. They are W8MI, W8GRL and W8-QGZ. So there you have quite a nest. All of them but one were out to your house on the night of your meeting. Rod tomorrow is my last day of work with the Detroit police department. Have found a job yet but will look around and see what gives in industry. Will be kind of lost for a while but it is a thing I have always looked forward to and now it is here. Hi Hi. Old man EH retiring. Have several prospects of jobs in mind but am not going a running after them. Really don't have the slightest idea where I might end up. So back to you. W8BYB de W8HP. K

... You asked me what machine I am using. Perhaps you were talking about model 14 reperf. Or the model printer I am now typing on. She's the same old "reliable" model 26. Sure works perfectly. Had slite trouble right at beginning when I received the printer. But got it fixed. And she's been working FB with no adjustments whatsoever since last winter! And you should see the hard service the 26 gets here. Back to you Jack I hope you printing me good now? W1BGW de W9TCJ, K * * * *

... W6AEE and W2BDI de W5RJG. Roger and land line from both of you. Boy if you could read each other as well as I read both of you we would really have us a three way hook up going Hi. Both signals seem to be building up. Maybe not. Won't hold it but just pass it on to Ed and see if he hears you Merrill.

... W8IJV de W1AW. Well copy not quite solid here but pretty good. Fading getting to be quite a problem. OK on the DX work there. Well, I haven't worked any DX for so long that I forget how it feels Hi. Guess the last new country here was way back when FO8AJ was on from Clipperton Island. Couldn't even raise KC4AB when they were on. darn it Hi. Just worked sixteen stations in the RTTY contest, and don't imagine I will get on RTTY again this evening. Since we have the rig working again. I think I will try to QNI in the RTTY net once in a while and see what is doing there. W3UWM is on the net and is located in Pittsburgh, Pa., which is my old home QTH, so maybe can get some traffic back to.

... "Well whats new and why in the world can't I raise some of the W5 and W9 and so on I hear at times. Incidentally I took the Dutch Cleanser to the Xtal as you can see. W6DOU es W6AEE this is KL7CK Juneau Alaska.

* * * *

... W6NPB this is W7NVY in Salt Lake City in the state of Utah. OK well I got the last part where you talked about Merrill from there on I got everything solid. Well I hope that you, like me, get everything nailed down someday I started in RTTY biz last Aug. when I got this gear and got interested in RTTY about the middle of Sept. when I got enough \$\$\$ to subscribe to RTTY the rag.

. . . Many thanks for all the fine FB dope. Sure would be fun to compare my converter for noise characteristics, tell me Phil is your converter using a band pass filter then a limiter stage into discriminators??? Or is it the little nemo converter??? I have a diagram of your little nemo converter circuit. W2JAV de W9TCJ.

... W7AXJ de W6DOU Hayward. OK Ernie and sorry about the QRM on there but here is short rundown again.

. . . Bob Unsworth tried quite an interesting stunt on me vesterday. He made an audio tape of my sigs and then he put a sensitive relay in the keying circuit of his converter and played the tape into the converter and keyed his transmitter with the relay and the copy was perfect. Only bad thing is that its still at the same speed that it was sent at but it serves a purpose I think. I'm going to install one here as permanent part of the TU with a couple of keys to switch it with and if I want to experiment I will have it handy. and besides I could cut some tape off of your TU with your audio oscillator that you use on two and play it off your reperf and that way I could have a test tape at a fast speed that wouldn't wear out.

. . . Ed, he says the fone station is giving you trouble. Not reading you so well. How do you read him. W2BDI with W6-AEE de W5RJG K.

Traffic Net News

By EMILE DUVAL, W6FLW

The RTTY Society of Southern California Net operates every Tuesday evening at 8:00 p. m. on 147.85 mc.

ACTIVITY FOR THE MONTH OF JANUARY, 1955

Jan 4-W6CAP, N. C.-24 Checkins W6AFX W6NWM W6CAP W6NV W6CG W6PNW W6CKS W6RL W6EGZ W6SCK W6EU W6SCQ W6KJO W6TLO W6IAL W6WYH W6IIV W6ZBU W6IZJ W6NUY W6JAU W6CND W6NAT W6LSG

Jan. 11-W6CG, N. C.-26 Checkins W6AEE W6IZJ W6AFX W6JAU W6BWQ W6KJO W6CAP W6MQP W6CG W6NAT W6CK W6NCP W6CKS W6NV W6CLW W6NUY W6DNJ W6SCK W6EV W6SCQ W6FLW

W6IEU W6ZBV Jan. 18—W6FLW, N. C.—26 Checkins

W6IAL

W6TLO

W6WYH

W6KJO
WW6KMT
W6LGO
W6NAT
W6NCP
W6NUY
W6RL
W6SCK
W6SCQ
W6TLO
W6WYH
W6ZBH

Jan. 25-W6IZJ, N. C.-24 Checkins

W6AEE	W6IIV
W6AFX	W6ILW
W6BGE	W6IZJ
W6CG	W6JAU
W6CK	W6KJO
W6CGN	W6LGO
W6CKS	W6NAT
W6CYR	W6NCP
W6EGZ	W6RL
W6FLW	W6SCQ
K6HJB	W6WYH
W6IAL	W6ZBV

East Coast Traffic Net

The East Coast RTNET meets regularly on Wednesdays at 8:00 p. m. on 3620 kcs. At present approximately twelve to fifteen have been checking in and taking part in the handling of traffic.

The Mid Western RTNET also meets on Wednesday at 7:00 p. m. on 3630 kcs from information received by RTTY. 10 to 15 stations have reported in during the last few weeks.

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For Traffic Net Information: W6FLW W6IZJ For "RTTY" Information:

> W6CL W6DEO W6AEE