RTTY

NEWS OF AMATEUR RTTY

AUGUST, 1954
25 Cents
Vol. 2, No. 8

HORSE TRADES

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.

FOR SALE—Toroid Filters, 3 section, standard frequencies. Either Mark, Space, or Band Pass.
M. W. Gotes c/o W6CG

FOR SALE—Teletype 10A Bulletin Printer.....W2NAB

WANTED—Keyboard for 15. Also Reperforator.....W2ANB

WANTED—Keyboard for 15.....W9HJV

WANTED—Cover only for model 14 Reperforator. W1BGW

WANTED—Tape Gear. W4TJU

WANTED—Cover only Model 14.....W9TCJ

FOR SALE—Model 12, less cover and keyboard.....W6ZNU

WANTED—Keyboard for WU Model 100 simular to Teletype Corp. Model 15.....W7CGA

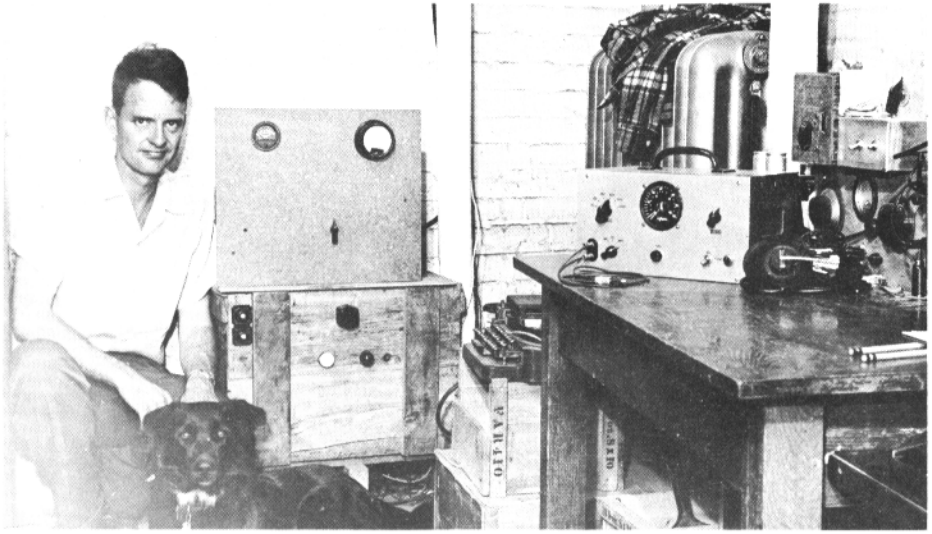
FOR SALE—Model 12 Complete.....WGDOU

FOR SALE OR TRADE—Tape Perf. and Dist.....W4EBH

WANTED—Material for RTTY Bulletin.....RTTY

RTTY, Inc.
3769 East Green Street
Pasadena 10, California

Return Postage Guaranteed



W9TCJ

ROBERT H. WEITBRECHT
Williams, Bay, Wisconsin

TRANSMITTER: 400 watt 813 final, driven by either of two exciters. The 80 meter exciter is an old Field Day portable, using an ECO, with diode modulator added. The 40 meter exciter is of the heterodyne type using a 12.5 mc Xtal oscillator and a tunable 5.3 mc Clapp oscillator with diode modulator working upon its cathode. Antenna is an end fed 135 foot piece of wire, placed mostly at a 40-foot level.

RECEIVER: BC-348-Q, modified and fitted with a double-conversion Q-fiver, voltage regulation, S-meter, etc. A diode modulator is installed upon its high-frequency oscillator to permit a vernier tuning system to be operated directly from the operator's position in front of the teletype. An audio level meter (small multimeter) is connected at all times to the receiver's output for monitoring the audio level into the terminal unit.

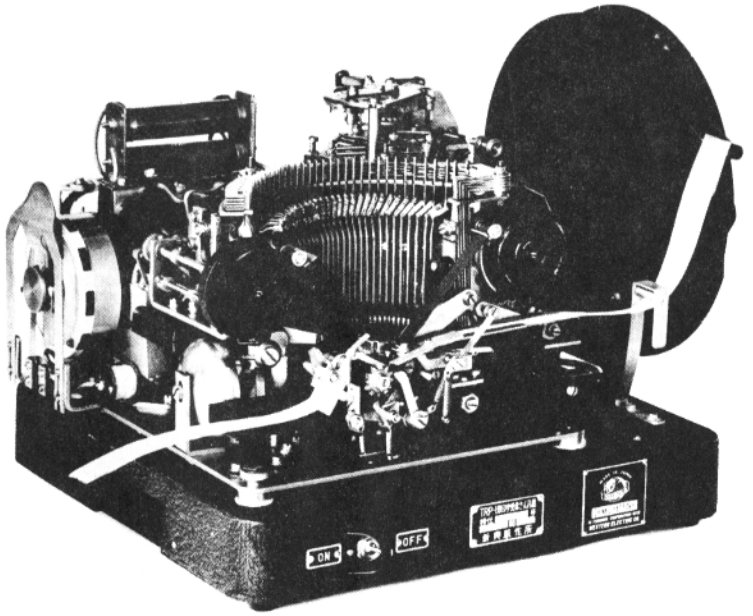
TERMINAL UNIT: Straightforward bandpass filter-limiter-discriminator combination, with broad mark and space filter responses to minimize troubles due to any drift or off-shift in the received signal. Full limitng on signals as small as 0.03 volt RMS, although in use, AVC is employed and the input level into the T.U. is set at 5 volts. A simple but efficient tuning indicator system consisting of two 6E5 "magic-eye" tubes is mounted on the table adjacent to the vernier tuning knob, mentioned above, to facilitate precise tuning-in of FSK signals. Full electronic drive, without polar relays, is employed for reception and transmission. The keyboard operates a tone oscillator (AFSK) which is then fed into the T.U. via appropriate switching circuits for transmission and for local copy at same time. The switching scheme also permits injection of AFSK signals from an external source, such as tape distributor or another RTTY signal as received for transmission.

TELETYPE MACHINES: Models 12, 26 printers and 14 typing reperforator. Also available are a keyboard perforator, electronic transmitting distributor with tape head, etc.

OTHER INSTRUMENTS: 100 kc frequency standard with 10 kc, 2.5 kc, and 2 kc multivibrators; also has 1000 cycle precise tone output. Constantly used to set up net frequencies, check drifts, adjust and align equipment. Also have an audio frequency meter with a just-installed shift indicator along the lines of W2JAV-W6ZBV designs. Extremely useful for adjusting shift precisely, for monitoring signals from other stations, and for moving one's frequency a specified number of kcs. Also used from time to time are an oscilloscope and an audio oscillator.

JAPANESE TELEPRINTER (6 UNIT CODE); EQUIVALENT TO TELETYPE CORP. MODEL 14 (5 UNIT CODE)

JAPENESE TELEPRINTER (6 CODE UNIT) WITH COVER ON



JAPANESE TELEPRINTER (6 CODE UNIT) WITH COVER OFF

Second Annual **RTTY** *Sweepstake Contest October 30 and 31, 1954*

The Second Annual RTTY Sweepstakes Contest starts Friday evening at nine (9:00) p.m., EST; eight (8:00) p.m., CST; seven (7:00) p.m., MST; and six (6:00) p.m., PST, and will end at three (3:00) a.m., EST, Sunday.

As provided last year, all Amateur Radio Teleprinter equipped stations may participate, with compliance with the FCC rules governing Amateur RTTY operations. Scores for those stations who are copied not complying with these rules will be disqualified.

All frequencies may be used, which are authorized by FCC. This will enable all stations to compete on a more equal basis. That is, a contact complete on different band with the same station are to be credited. Cross band contacts will be credited only to the station employing additional frequencies to complete the contact. That is to say, either another frequency on the transmitter or the receiver.

Highest score in each state will be given a letter setting forth the accomplishment. A complete listing of stations competing or worked during the contest will appear in an early issue of RTTY.

Entries should be in the following form: Message number, your call, his report, his message number, call, time, State, frequency, and the number of points claimed. All entries should be mailed not later than November 7, 1954.

Last year's contest had twenty-nine stations taking part and they reported they had a lot of fun. Some of the stations even ran over the contest period due to the amount of fun being had with the first Sweepstakes Contest on RTTY. Some operators asked that the contest period be changed so as to provide Sunday with the family, others asked for more contest time. The rules have been modified to try and take care of the largest number of requests. Hope to see all of you during the contest period.

CONTEST FORM

W6AEE, Pasadena, California. 80-40-20-2 meters operation.

No.	Call	Ck.	Place	Time	Date	Freq.	Pts.	Area
Nr1	W3PYW	5-8-9	Silver Springs, Md.	1701	30 Oct. 24	7142 Kcs	1	1
Nr2	W2JAV	5-6-9	Hammonton, N. J.	1708	30 Oct. 54	7140 Kcs	2	1

CONTEST PERIOD

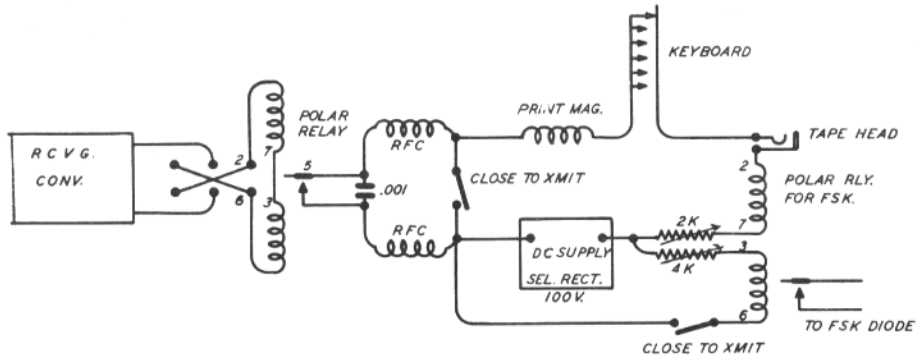
E.S.T.—9:00 P.M., 30 October to 3:00 A.M.,1 November 1954

C.S.T.—8:00 P.M.,30 October to 3:00 A.M., 1 November 1954

M.S.T.—7:00 P.M., 30 October to 1:00 A.M., 1 November 1954

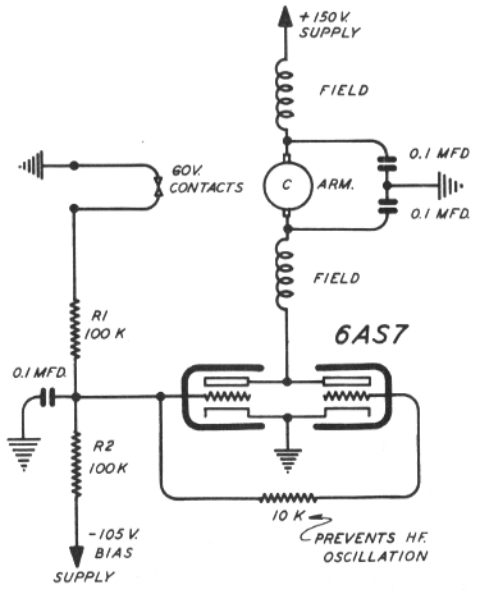
P.S.T.—6:00 P.M.,30 October to 12:00M, 31 October 1954

CIRCUIT ARRANGEMENT FOR RTTY STATION



Above is the polar circuit arrangement as used by Jack Berman, W1BGW, Dorchester, Mass. It may solve some of your "local circuit" problems. The resistors are made variable so that the space current may be set at exactly twice the mark.

NOISE REDUCTION ON MODEL 12 MOTOR



In case you still have some die-hards, like myself, who like the Model 12 workhorse or can't afford a 26, here's a suggestion to cut down motor noise and governor noise where DC motors are used. The circuit is similar to that recommended for the keyer magnets by Bob Weitbrecht, W9TCJ, but it has a much longer time constant. The noise suppression is excellent, far better than I was able to get with ordinary methods. Incidentally, point-one capacitors mounted on the end-bells of both motors do a good job of squelching brush hash.

—73, Bruce Meyer, WOHZR

AUTOMATIC CARRIAGE RETURN AND LINE FEED SYSTEM FOR 26

W6NYF has announced the successful development of a simple system for equipping the Model 26 Teletype machine with automatic carriage return and line feed features. This arrangement is very valuable for eliminating overprint on circuits subject to interference and signal miss. It is especially useful on unattended auto start circuits. Tests on the local two meter teletype net provided copy entirely free from overprinted lines when the newly developed system was employed.

W6NSS suggested the system for the carriage return and W6NYF developed the line feed arrangement as well as reducing the entire system to a working mechanism. An arm attached to the paper guide trips the carriage return lever at the back of the printer when the carriage approaches the end of its travel. The line feed device employs a solenoid to pull the line feed plate at the back of the printer. A micro-switch operated by the air damper lever discharges a hundred microfarad condenser into the solenoid. This pulse discharge system makes possible sufficient force in the solenoid as well as providing burn-out proof electrical source.

RYRYRYRYRYRYRYRY

Please pass the word around out there that I have available complete instruction books for the Western Union 23-A Printer-Perforator. Maybe some of the boys out there got one of them. Fine machines, but just a little unusual in that they use the wide tape and so far no tape heads for wide tape have shown up. Since we had to pay to get the illustations photostated, the price is $3.00. If we sell enough we may get our money back hi. We would like to turn them out for free, but conditions being as they are . . .

—73, George, W9SPT

Enclosed is M.O. for renewal. Don't want to miss any issues. Am getting ready to go on two weeks active duty with the Navy. Keep up the good work. Have not heard from the Eastern Society for quite some time.

—73, Bill Forster, W8QDW

RYRYRYRYRYRYRYRY

Bill, KM6AX would like to make RTTY test from Midway Island to California. He would like to make on 20 meters and asked me if I would help him find a schedule. I was told about your organization so I will leave it up to you to help if you can. Thanks and

—73, Lennie, W6HJK

RYRYRYRYRYRYRYRY

Just copied Phil W2JAV in which he said you were looking for comments on another RTTY Sweepstakes. I'd like to go on record as saying "I'm all for it." If I'm home that week end and not in Fort Worth, Texas, you can count on me . . . I have no comments regarding the scoring, etc. Last time seemed O.K. to me. What difference does the score make any how? It's the sport of the thing I like. By the way, I expect to be spending some time in Fort Worth soon —Do you know of any RTTY fellows down that way? Would help me to spend long evenings if I can find some.

—73, Roy, W2TKO

Ed. Note: See W5HZF es W5RJG.

RYRYRYRYRYRYRYRY

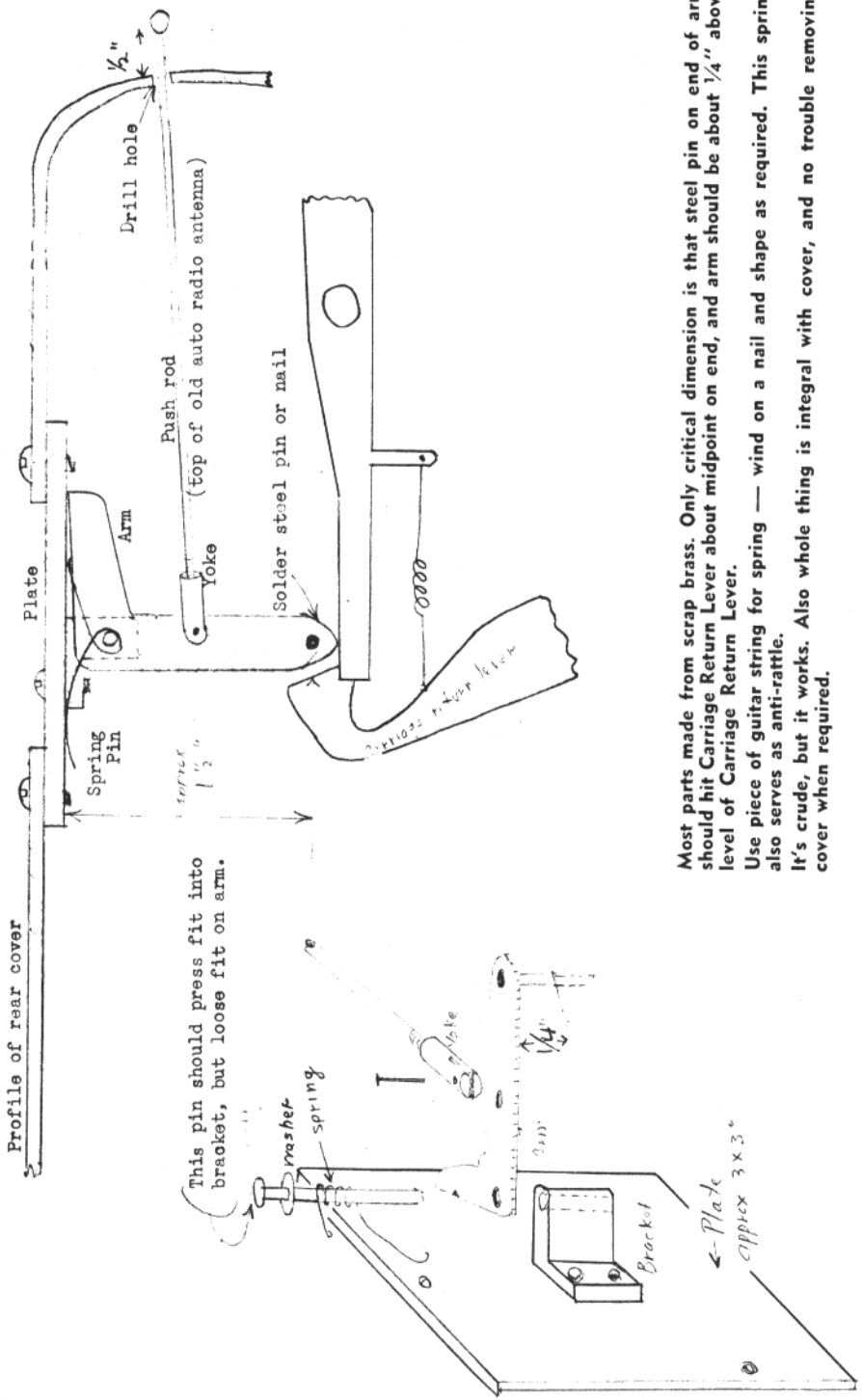
Last week, I have come into possession of a Model 26, built a converter (W6AEE). and with a Viking II I am now able to operate RTTY on all bands.

—73, Ben, W9ZBK

* * * *

W0HZR sends in a good suggestion. How many of the RTTY operators place RTTY or TTY along side of CW and Fone on their QSL? Bruce says it pays to advertise.—**Editor.**

MODEL 26 TELETYPE MANUAL CARRIAGE RETURN



Most parts made from scrap brass. Only critical dimension is that steel pin on end of arm should hit Carriage Return Lever about midpoint on end, and arm should be about ¼" above level of Carriage Return Lever.

Use piece of guitar string for spring — wind on a nail and shape as required. This spring also serves as anti-rattle.

It's crude, but it works. Also whole thing is integral with cover, and no trouble removing cover when required.

Net Activities

Starting this month, **Traffic Net News** is being changed to this new title. At the time RTTY started its publication, there was not too much net news to report, hence the West Coast news was featured but as time has gone along, incerased activity has taktn place.

Currently three nets operate regularly.. On the East Coast, the RTNET (East Coast) meets on Wednesday evenings. Some twelve stations are reporting in regularly. With most of the stations on the eastern seaboard. Frequency used is approximately 3620 plus and minus 5 Kcs. The exact time and frequency will be listed in a block along with the other Nets in future issues of RTTY. Net control rotates from station to station in order to better teach operator the problems associated with this form of operation.

THE RTNET (MIDWEST) meets also on Wednesday evenings but at a slightly later time. Operations are approximately 3630 Kcs. Exact time and frequency will be shown in block also. Liaison between the Midwest and East Coast RTNET is handled by W9TCJ and W3PYW at this time.

The RTNET (Southern California) meets Tuesday evenings at eight p.m. on 147.85 Mcs. From twenty to thirty stations checking in. W6AEE handles liaison with the other two nets on forty meters. An attempt to form a low frequency RTNET is under way, and should provide additional traffic channels to other portions of the country. Other areas are known to be forming nets. RTTY would appreciate reports to be included in RTTY.

RYRYRYRYRYRYRYRY

ACTIVE 2-METER RADIO TELETYPENET OPERATING IN DETROIT

A report from W8ZM by forty meter radio teletype tells of a substantial activity in two meter radio teletype in the Detroit area. About ten stations are active on the Detroit fixed frequency radio teletype net. More stations are being added every week. Most stations are employing surplus Motorola Taxi Cab Radio sets. Operation is on 147.3 megacycles, fixed tuned transmitters and receivers are crystal controlled to the Net frequency. Model 26 teletype machines are the popular equipment on the Detroit Net. These teletype machines are available from the Telephone Company in the Detroit area to amateur stations and most of the available machines have been taken up locally. W8ZM reports that there is a lot of local enthusiasm for two meter radio teletype.

Subscription Rate 2.50 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:

W6CLW—Ed Simmons
W6AEE—Merrill Swan
W6SCQ—Lewis Rogerson

For Traffic Net Information:
W6FLW **W6IZJ**

For 'RTTY" Information:
W6CL **W6DEO** **W6AEE**

TAPE OFF THE FLOOR

"This forty meter RTTY is the bunk. There aren't enough signals on the air to make playing with it worthwhile. I am going back to CW if the conditions don't get better. Actually, I am very much displeased with RTTY in general. For some reason everyone sits down on the same frequency and all get in one big round table. It gets so you only have a chance to say something once every half hour or so. It reminds me of 75 meter mobile frequency where there are too many stations on the air and nothing gets accomplished. I think that we should limit the number of stations in a round-table to three or something like that, and why the heck, does everyone have to sit on the same frequency "

—W6VPC de W6BNB

Any Ideas?—Editor.

* * * *

Please pass the word, etc., George W9SPT . . .

* * * *

Visitors at RTTY in the past few weeks . . . W7KWB, W9GRW, W7KV, W7OXT, W6MVO, W4UPU.

* * * *

W2JAV Hammonton and W1BGW, Boston de VE2ATC, Montreal, rite back—copied most of the transmission Jack at least I could make it out but your signals go rite out sometimes so not so good today.

CQ CQ CQ de W3IXJ/3 Baltimore, Md. AR AR AR
R R R Tks W1BGW de W3IXJ/3 OK Jack name here is Jim. On the rig there fine. The rig here is running about 600 Watts also it's a BC-610 and the receivers are Collins 51J's two of them. The antenna is a 16 foot whip on the back of the shack . . .

* * * *

W6OWP is back on. I copied him solid on this gadget. Sure glad to copy someone from the east coast, Jack. First time that has happened, will turn it back to Merrill now. W6AEE and the gang this is W6OLC W6OLC KKKK . . . Well that was tape from Bart and now to Bob down at Los Alamos. W5VJP W5VJP es gang de W6AEE W6AEE, Pasadena. ar KKKKKK

* * * *

But wanted to get in the Net Weds, had nice visit hr last week or so ago from W2TKO repeat W2TKO. Guess that's the story Jack and Al and Phil. All solid land line and FGL and RBF fine sigs too. Hope copy OK this time. 73 All around W1BGW de W1BDI KK

* * * *

But glad that you gave me a call and thanks. Frank your signal was reversed but is now correct and can print your tape. Frank see if you can print him. He is in Boston, Mass. W1BGW with W6ZNU in the hole de W6EV ga ga Jack KKKK

* * * *

Hr Nr 1 W1BGW Boston, Mass to East Coast RTTY Net
Following letter received from New York State Civil Defense Commission. "The services your station gave us during the June 14-15 'Operation Alert' proves beyond any doubt the need for RTTY circuits in Civil Defense Radio Communication.

"Please extend my sincere thanks and appreciation to the 3620KC RTTY Net Works for standing by during the operation. Their cooperation most certainly permitted us to prove that this form of communication is quite necessary."
—/s/ by Vince Kenney for the Director

VHF TELETYPE SOCIETY BULLETIN NUMBER ARTT-3145

38-06-61st Street, Woodside 77, N. Y.

Only 22 of the 40 Tape Transmitter "Heads" listed in Bulletin 3144 were actually obtained from the News Company and turned over to members, since a last minute change of plans made them decide to keep the remainder, at least for awhile.

In the meanwhile, 37 of the same tape transmitters are being released by one of the other companies. 18 of these are being immediately "earmarked" to be sent to those members who lost out under Bulletin 3144. The remaining 19 tape transmitters are being offered now and are available from the Telegraph Company at the same price as the previous ones. ($16 which includes the $1 packing charge.)

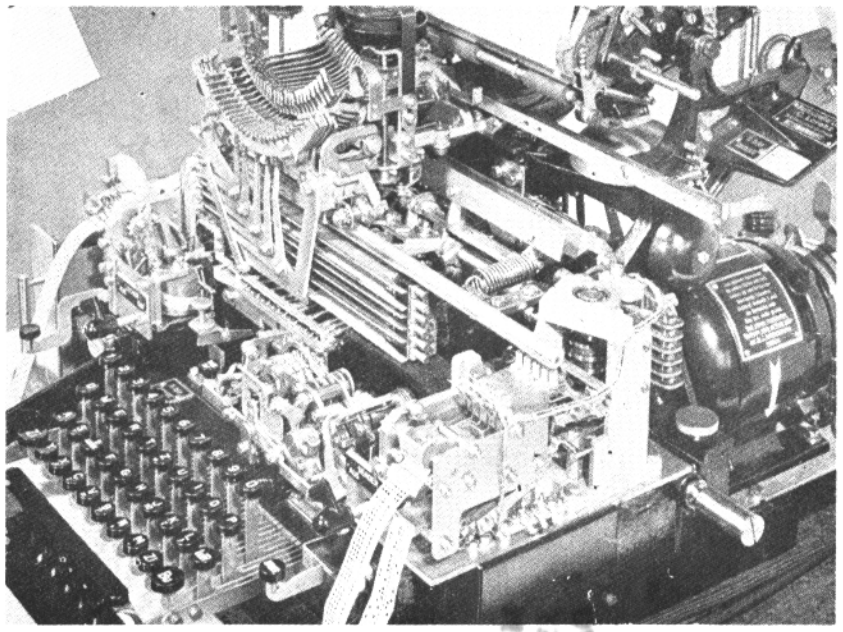
100 receiving cam assemblies are available for Model 12 keyboards or receiving distributors. These consist of the receiving shaft, fibre gear, front and rear felt clutches, receiving cam cylinder and range-and-latch mechanisms. They will cost $3.75 per assembly. (Please include 50 cents postage.)

The following items will be assigned to members strictly in the order of request:

GROUP 7

Description	Quan.
Typing Reperforators AC Synchronous Motors Model 23-A (Print in ink and Perforate on same paper tape simultaneously	2
Model 26 Printer AC Synchronous Motor Keyboard, Cover and Table. (Tbale slightly damaged) standard font of type.	1
Model 26 printer Same as above except type has fractions in uppercase.	1
Synchronous motors Bodine. 1800 R.P.M. intended for distributors but may be used with keyobards.	12
Model 15 keyboards Modified by the addition of an AC motor to make keyboard usable with any model printer. Otherwise conventional Model 15.	
Model 11-A keyboards AC synchronous motors.	6
Model 11-A keyboards Same as above but DC.	3
Model 24 keyboard	1
Non-typing reperforator AC motor	1
Distributor assemblies (RCA) Contain faceplates, bearings and brush-shaft with fibre gear. Also contains motor pinion for motor listed above (Item 4). Casting is machined for this motor.	7
Bulletin page printers AC motors ,single magnet Selector mechanisms. Self-contained paper roll supply (paper not furnished). Complete with covers but less tables.	9
Teleprinter power supplies, rectifier type	8
Printer test set Contains variable-speed DC motor, special test distributor faceplate.	1
Pritner test set AC synchronous motor. In portable case. Sends teletype signals and introduces known amounts of bias and distortion. Also sends square-wave "reversals" for line-up of circuits (in place of RY)	1
Combination tape transmitter and distributor set with governed motor.	3
Keyboard perforator Model 14	4

Unique Teleprinter Developed by Lorenz Company



LORENZ PRINTER — Close-up view of new page teleprinter, which combines in one machine the functions of four different units. Developed by C. Lorenz, A.G., an IT&T German associate, it is produced in both wooden and metal cabinets.

A page-type teleprinter incorporating tape perforating and reperforating attachments, as well as a tape transmitting unit, has been developed and is now being produced by C. Lorenz, A.G., Stuttgart, one of IT&T's German manufacturing subsidiaries. This printer-transmitter combines in one unit the functions of four different equipments.

A feature of this teleprinter is the tape perforating-reperforating attachment which permits preparation of a punched type simultaneously with the typing of incoming information. This perforating - reperforating attachment, mounted at the left front of the machine is driven by an additional cam attached to the teleprinter main shaft.

The printer may also be employed as a keyboard perforator to prepare tape prior to transmission. This is accomplished by disconnecting the printer from the line and connecting it to a local current supply. A special protective switch blocks the keyboard upon receipt of an incoming message and eliminates the possibility of interference between the keyboard perforator and the message receiving function.

The transmitting attachment mounted at the right front of the machine, permits transmission of the punched tape through emission of impulses by a cam-driven distributor. This attachment is driven directly by a worm gear on the teleprinter motor shaft.