R н

н

K

VOL. 1

E

E

E

SEPTEMBER, 1953

NO. 9

First Annual R774 Sweepstakes Contest

CERTIFICATES TO BE GIVEN HIGHEST SCORERS IN EACH AREA

CONTEST PERIOD

Ε.	s.	т.	 	 ٠.,	 	 			 		4.00	Ρ.	Μ.
C.	s.	т.	 	 	 	 	 		 	 	3.00	P.	Μ.
М.	S.	Т.	 	 	 	 	 	٠.	 	 	 2.00	Ρ.	Μ.
Ρ.	S.	T.	 	 	 	 	 		 	 	1.00	Ρ.	M.

In order to stimulate RTTY activity, the first Annual Amateur Teletype Sweepstakes Contest will be held October 31 and November 1, 1953.

All Amateur Radio Teletype Stations may participate, the only requirements being the compliance with the FCC rules governing Amateur Radio Teletype operation. Scores will not be credited to those stations who's emmissions do not meet the above requirements.

All frequencies may be used, which are authorized by FCC. This will enable all stations to compete on a more equal basis, at this time. At some later date, this rule may have to be modified, to count only one contact with each station.

Scores will be on the basis of one point for each message transmitted and receipt acknowledged, and one point for each message received. Points scored as above multiplied by the number of States, Provinces, Countries, (ie: Japan, Hawaii, Cuba, etc). will give your total score.

Highest score in each of the above areas will be awarded a Certificate by RTTY. A complete listing of all stations competing will appear with results. 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 7th, 1953.

Get your equipment in order and join in on the fun.



for equipment to buy or trade. It is a free service who have teletype equip-ment for sale or trade This page of the Bulletin is for use of amateurs looking

SOUTHERN CALIFORNIA RADIO TELETYPE SOCIETY

Wanted—Terminal Unit or T.

₽

W6TQY

motor for model

Keyboard for model 12 and tor for model 15

sync

items (Japanese radio equipment)

Or collectors
....W5ENH

W6KNI or W6EV

d—813, will swap 215A relay or dual vib pack 300v at 150 ma. Or collecte

Wanted—Tape Off The Floor Material

12TT with keyer for 15

printer

and

Keyboard for model

AN/FGC-1 Manual

W2VDM W9SPT

WØCIH W6DTZ Wanted-

For Sale

Ç

Wanted-Model 12 Sync

Sync motor for 14 or will trade. Model 12 complete, sync motor,

...W9LKK

W9LKK

-Model 12 Sync motor and gears....WØNME

getting some one on the air.

and may be the means of

motor and gears..

3769 East Green Street Pasadena 10, Calif.

Return Postage Guaranteed

Food for thought

With the returning to Standard time for many of the areas, and shorter daylight hours, we find band conditions much better. Which is another way of saving that fall is here and winter just a short time away. This brings to mind the question, are we ready to take advantage of it? This will be our first winter season since the F. C. C. authorized Radio Teletype on the various amateur bands. Many things will require thought to make the most of this new type of amateur activity.

One of the many problems facing the RTTY operators is that of frequency. At present time (August) most of the activity takes place around the forty meter frequency (7140 kcs \pm 5 kc), with an additional group on eighty meters (3620 kcs) and still a smaller number on twenty meters (14325kcs). Each of the above frequencies have their followers, with a few who work both eighty and forty meters.

Eighty meters has been very good for operation in the Eastern portion of the country early this year, but with the coming of summer, static and skip. activity dropped. Forty meters on the other hand was not quite as bad from a static standpoint, but skip and QRM were still present. Forty has proven to be the best frequency for day to day contacts, cross country. Night time brings skip in for the semi-local contacts as it does in eighty meters. Twenty meters has provided a few operators with the opportunity to make some good DX contacts. However at this time the band is not as reliable as the lower frequencies, and then is only open during the daylight hours for the greater portion of the time.

New stations are appearing almost weekly now which brings up another problem, that of QRM from another RTTY circuit on the same or an ad-

jacent frequency. Data from commercial sources indicates a band width of 1.1 kcs is required for teletype operation with the type of machines in use on amateur bands. This is far less than that required by the average properly operated fone, either straight amplitude modulation or single side band suppressed carrier fone. Amateurs have not in the past given up operation because of crowded fone bands. Better receivers can be purchased or built. Many circuits for QRM reduction have appeared both in QST and CQ in the past. Among these are those describing filters such as the very excellent ones built by Collins Radio. those describing I. F. strips from the 85 kc command set units and many others. Another type of selective receiver makes use of the Crystal (surplus) type filter I. F. units.

The requirements for the transmitter are more severe than those one would use for a good C. W. transmitter. Good power supply filtering and good oscillator stability are items which most amateurs are familiar with already. The requirements for antennas in the simpler cases are again the same as for any other type of amateur operation. For the more advanced operator, diversity antennas, ie; one horizontal and another vertical. may be desired. Much has been written in the past regarding the advantages of a good antenna, and need not be expanded upon here.

The next item to be considered is the teletype itself. Is it clean and properly oiled? Have the necessary noise reducing measures been properly applied? Again, this problem is no more difficult than that of eliminating TVI from a transmitter or ignition noise from an automobile mobile installation. Rewiring the teletype unit on a planned basis, as one would wire an audio amplifier to minimize 60 cycle AC pickup, shielding where necessary, and addition of noise reducing filter, resistor capacitor networks where needed will pay off in more solid contacts later.

Another unit to consider is the Converter, or Terminal unit. Are the filter frequencies right, does the band pass filter operate properly and is the limiter doing a good job? Each operator can best answer the above questions regarding his own rig. Many excellent articles have appeared in the past and more will be printed. Tuning indicators, such as the zero center milliameter, and cathode ray 'scope can be added to increase the ease with which stations can be tuned in to print correctly. Do you have provision for polarity reversal (for the new stations who are just getting started) and bias adjustment for those stations whose shift is not quite right, or those who have mechanical bias in their keyboard or transmitting relay? In the rush to get "on the air," many have omitted these items. Now is an excellent time to install those for which you can forsee a need.

How good is your exciter? Will it shift 850 cycles on each band and remain stable? As with other portions of the RTTY operation equipment, this has been well covered. New methods and further modification to provide frequency shift correctly and easily will appear as more amateurs try this new communication medium.

To date most of the Amateur Teletype operation has been in getting acquainted some of the varied problems associated RTTY. Many have reported a renewed interest in Amateur Radio as a result of operating another amateur's RTTY equipment. Gradually more and more equipment is becoming available. But after their initial period of becoming familiar with RTTY, we should find many uses for our new method of communications, traffic, W1AW Bulletins, contests, new circuit development, DX and the god old ham standby ragchewing. Contrary to opinions expressed by non-RTTY amateurs, Teletype displays the same type of individuality as CW or fone. "RTTY" would like to see some of its readers who have tape gear and time.

to write their SCM for an ARRL OBS appointment.

In the matter of frequencies, much remains to be decided. Should Crystal or VFO's be used? How close from a practicle operation standpoint, can two stations operate? Over what portions of the bands should RTTY operation be expanded. The eastern stations chose 7140 early and the west coast group operated 7140 and 7090 kcs. This latter frequency has been abandoned to keep a unified operating plan. This can be best determined by listening to the band. Checking for conflict with organized Net Operations will enable us to best operate along with CW stations. Many CW stations have in the past, either knowingly or otherwise interfered with RTTY operations. But as time goes on CW and RTTY operators will find that each has its place and can operate together with a minimum of friction.

The opportunity to form traffic handling contacts, or nets, is an ever present activity. The Southern California RTTY Society has had its two meter net operating for over a year now. A few stations have either tape reperforators or automatic means of taking traffic from one frequency to another. One of the SCRS stations prepares local bulletins of general interest which are broadcast to all net members. Whatever the individuals interest may be, Amateur RTTY has a place for him.

"RTTY" would like to present it's first "Sweepstakes" type of contest to be held Oct. 31 and Nov. 1 Contacts to be made on any of the FCC authorized bands or cross bands. A bonafide contact would include reports and location with the copy being submitted to "RTTY" for each entry claimed. Photos and write up of the top stations to appear in "RTTY," with listing of all entries. A suitable certificate will we given to to those who enter.

"RTTY" will be happy to hear from its readers with comments, suggestions and of course criticism also.

the type-box toward its final position is at

high speed, but as the type-box approaches

the selected position, the toggle mechanism

reduces its speed. At the end of the type-

box travel, where further motion is blocked

by the index mechanism, the speed of the

type-box is about one-fifth of that at which

Elimination of the conventional type "bas-

ket" greatly reduces the size and weight of

the carriage that travels back and forth across the page, starting and stopping for

each character printed. A comparison of

the old and new type assemblies is illus-

trated in Figure 4. In a standard Model 15

teletypewriter, the moving carriage assem-

it would have passed this position.

A New

Teletypewriter

W. J. ZENNER Teletype Corporation

Reprinted by Permission of Bell Laboratories Record. July, 1953



During the past twenty or more years the use of teletypewriters has grown to such are now in operation in the Bell System. The Model 15 teletypewriter* was designed for general page teletypewriter service, and this machine has given very satisfactory

service for a long time. Now, an improved machine, designated Model 28, has been developed by the Teletype Corporation for use in the Bell System. The new teletypewriter per-

present Model 15, but has many more capabilities than the older model. It is expected that, eventually, Model 28 will replace Model 15.

Increased speed of operation, of course, was one objective in developing the new model, but this was accompanied by several other objectives, all of which have been attained. The new machine is quieter in operation, is more pleasing in appearance, and operates with low maintenance at

* Record, October, 1938, page 530.

speeds up to 100 words per minute.

Trends in teletypewriter design have been

directed principally towards reduced main-

tenance, increased speed of operation and re-

duction of noise. Steps in these directions

have been made in a new model teletype-

writer which contains several new features.

One of these is a small type-box less than

one-tenth the weight of the older carriage.

Of the several improvements in the new an extent that more than 60,000 machines machine, the most obvious is the printing mechanism. The type pallets, instead of being mounted on bars in the conventional manner are carried in a small rectangular box about 1/2 inch thick, 1 inch wide and

> 2 inches long (Figure 1). The pallets are arranged in four horizontal rows, each row having a capacity of sixteen characters. To type a character, the typebox is moved to

forms the same general functions as the bring the desired character to the printing point, and a printing hammer, shown in Figure 3, operates to drive the type pallet against the typewriter ribbon and paper. Each pallet is provided with a return spring that restores the pallet to its normal position after printing. After the printing hammer has operated, the type-box returns to its initial position below the printed line on the paper, so that the typing becomes

> Characters in the left half of the box are letters; those in the right half are figures. A shift mechanism is used to change from

> > Bell Laboratories Record

letters to figures. Movement of the typebox, in selecting the desired character to be printed, is controlled by two index mechanisms, one controlling the vertical motion to select the proper row of type, and the second controlling the horizontal motion to select the desired character in that row. These two motions together form a rectangular co-ordinate system for all the thirty-two permutations of the standard five-unit telegraph code*. A unique toggletype coupling mechanism is provided in the drive system so that the type-box can be stopped in various positions in a gentle manner and without noticeable impact. With this mechanism, the movement of

Fig. 1 (right) – The type-box, shown in comparison with an ordinary paper clip.

bly weighs slightly over 5 pounds; the carriage assembly in the Model 28 has a total

Fig. 2 (below) — The Model 28 teletypewriter.



weight of 8 ounces. This 10 to 1 weight reduction results in a very fast carriage return, the carriage returning easily within the time of two character intervals (signals received for carriage return and paper feed) at 100 words per minute. Gravity has no significant effect on the carriage motion. The machine can be operated safely on shipboard or in other locations where it might not be in a level position.

Since the pallets are carried in an accurately made box instead of at the ends of type bars, as in the older machine, type alignment is controlled by manufacture of the parts with no further adjustment required. Stability of alignment, too, is greater, and this should reduce maintenance.

This small light-weight carriage also makes possible an over-all reduction in size and weight of the machine, and permits the use of stamped sheet metal framing instead of the massive cast framework used

^{*} Record, loc. cit.

THE PERFORMANCE DATA INDICATES TH

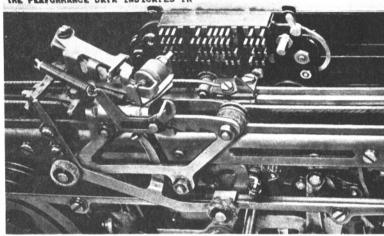


Fig. 3 - When thetype-box is in the desired position, the printing hammer drives the type pallet against the ribbon and paper.

on the older machines. The weight of the Model 28 teletypewriter is 38 pounds, not including the cabinet and accessories.

At the right end of the type-box, a small manually operated clamping lever holds the box in its supporting carriage. This clamping lever may be released with a light finger motion so that the type-box can be withdrawn from the machine without using tools. Thus the box may easily be cleaned without brushing dirt into the mechanism of the machine. Also, the type-box may be exchanged in a matter of seconds for another having different character faces.

Since each character is separately mounted on an individual type pallet, only one operates at a time. In the older machines, with two characters on a single pallet, there is a possibility of printing part of the other character on a pallet if the adjustment is not exact, or if one of the characters is worn, or if several carbon copies are being made so that the surface of the paper is somewhat "spongy." The Model 28 is capable of making the same number of carbon copies as present machines, and because the same hammer blow is applied for all characters, the printing impression is more uniform than that of a type bar machine. This characteristic is very important when a large number of copies are being made. The printing blow can readily be increased for multiple copy work by

adjusting the tension of a spring by means of a manually operated position lever (Figure 3). Because of the simplicity of the printing mechanism, it is possible to make the shift from figures to letters and vice versa within the printing mechanism rather than by raising and lowering the platen roller. This simplifies paper handling and improves the readability of the printed record, since the paper remains stationary at all times except during line feed.

The ribbon spools are mounted on the machine itself rather than on the type carriage, thus providing a straight course for the ribbon travel. This not only facilitates changing ribbons, since the path is obvious and the number of guides is a minimum, but in combination with the more gentle blow of the new type hammer, it results in approximately doubling the life of the ribbon as compared to the older machines.

Another machine element that improves operation, reduces maintenance, and contributes to good receiving margins - that is, ability to tolerate distortion of signal pulses - is a newly designed clutch. Clutches of the new design are used not only for driving the selector cams, but for the various other power actions, such as moving the type box, feeding the paper, spacing, etc. This clutch is an all-steel internal expansion friction clutch, that disengages

Bell Laboratories Record

in the stopped condition, whereas the older clutch depends upon slippage between felt washers and steel plates when a stop is interposed, so that the driven member is mechanically held from turning. Figure 5 illustrates the method of operation. The continuously rotating driving member is a steel drum, the inner surface of which is grooved, hardened, and ground to give a flat surface on the tops of the grooves. The grooves between the flat surfaces permit wear products to fall away from the working surfaces. Within this drum, two hardened steel members act as drive shoes and are pressed into contact with the rotating drum by a spring-operated pry bar. The leverage system is so designed that through a system of very rigid force-multiplying levers, a small spring produces high normal pressure between the hardened steel friction surfaces. Since the clutch disengages in the idling position, the load on the motor at that time is very small. Life of the clutch equals that of the rest of the machine.

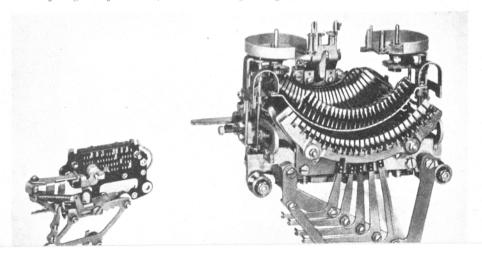
Performance of non-printing operations, such as line feed, carriage return, and shift, is controlled by a new mechanism contained in a separate subassembly called a "stunt box". This unit, which is accessible from the rear, extends across the full width of the typing unit and engages code bars that also extend across the machine. Notches in the code bars engage the function bars (Figure 6) of the stunt box. The

stunt box has forty-two slots, each of which may hold a function bar capable of responding to an assigned code, making it possible to control forty-two functions. Of these forty-two, approximately ten are reserved for the common functions, such as line feed, carriage return, and shift, and the remaining thirty-two are available for special purposes. Stunt boxes are interchangeable.

The keyboard mechanism in the Model 28 is also different from earlier designs. When the operator depresses a key, a latch is tripped which permits the code bars to move endwise by spring action. In the older machines, depressing a key moved the code bars directly, so that there was considerable variation in the forces required for different code combinations. Thus the new action results in a lighter, shallower, and more uniform key touch.

When the key lever is depressed, one of the bars that moves longitudinally trips the clutch latch and allows the clutch to engage a cam-operated mechanical distributor. This causes the code pattern to be translated into a start-stop electrical signal, the signal itself coming from a single contact assembly mechanically operated by the distributor. This contact has the form of a transfer switch and therefore permits either open or closed signal transmission or transmission of signals of alternate polarity. The contact is mounted in a metal box for mechanical protection

Fig. 4 - A comparison of the new type-box with the older "basket" carriage. The new type-box assembly weighs only a tenth of the older moving carriage.



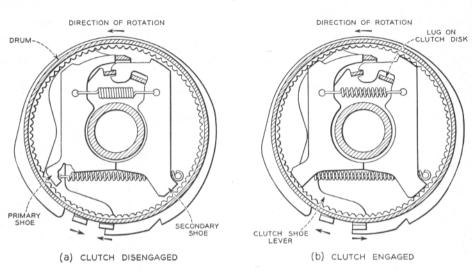
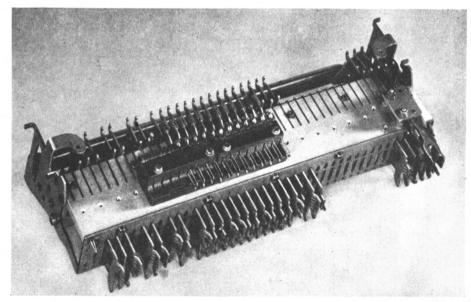


Fig. 5 – The clutch used on the Model 28 teletypewriter is an internal expansion friction clutch.

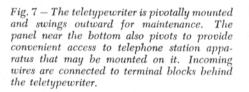
Fig. 6 - The "Stunt Box" for the Model 28 teletypewriter contains code bars for performing nonprinting operations, such as line feed, carriage return, shift, etc.

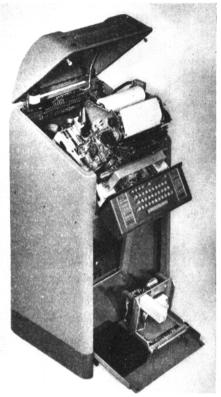


Bell Laboratories Record

and magnetic shielding (against radio interference), and requires no adjustment other than in positioning the box itself.

In designing the cabinet for the new machine, consideration was given to improved operating convenience as well as appearance. The equipment is housed in a new floor model cabinet (Figure 2) with all mechanical controls brought to the front so that the machines can be mounted side by side in rows. Even the manual platen crank has been eliminated and replaced with a rapid motor-driven feedout controlled by a button on the keyboard. A lamp within the cabinet illuminates the copy, and the angle of the window above the copy has been chosen so that glare is practically eliminated. The upper section of the cabinet swings open to provide access for insertion of paper and ribbons and for maintenance. Figure 7 shows how the teletypewriter itself may be swung upward







July, 1953

THE AUTHOR: W. J. ZENNER, Vice President of Teletype Corporation in Chicago, received the degree of B.S. in Electrical Engineering from Armour Institute of Technology. He also holds the degree of Electrical Engineer from the same institute. Prior to his graduation in 1928 he was with the Western Electric Company for three years. Starting with the Teletype Corporation in 1928 he was a group supervisor in the Development and Research Department, becoming chief engineer in 1943; in 1946 he became development and research consultant, being made Vice President in charge of Product Development and Sales in 1952. Mr. Zenner is the inventor and co-inventor of telegraph apparatus covered by seventy-five U. S. patents. He is a member of the Western Society of Engineers, the Armed Forces Communication Association, and President of the Board of Education, District 62 in Des Plaines, Illinois.

and forward to give access to both sides and rear of the machine.

Electrical accessories such as the line relay, motor control relay and fuses, have been placed in a box behind the machine. This permits installation of a standard machine where circuit termination requirements vary. In the cabinet below the teletypewriter a shelf is provided for a rectifier or other apparatus, and in addition, a front panel pivotally mounted to this shelf swings downward (as shown in Figure 7) providing a mounting surface for auxiliary

equipment if this is desired. Since operating experience indicates the Model 28 requires less maintenance than other teletypewriter equipment, it is expected that its field of use will be extended to include more remote locations. For example, Model 28 is being installed on ships of the United States Navy, and the Air Force has selected this model for use principally in areas not served by communication companies.

A Bell System service trial was completed in 1951. Urgent needs of the Armed Forces were given priority in early production.

ADDITIONAL ACTIVE LOW FREQUENCY STATIONS

CALL	NAME	LOCATION	TRANSMITTER	PRINTER	Tape	Rep
WIAW	Murŕay	Newington, Conn	1000 watts	12		
VE3GL	Rube	Toronto, Ont.	300 watts	12		
W8ZM	Bob	Detroit, Mich.	300 Watts	12		
W8BL	Earl	Detroit, Mich.	100 watts	12		
W5ENH	Ну	Little Rock, Ark.		12		
WØCIH	Paul	Superior, Nebr.		12		
WØNME	Ike	Stratton, Nebr.	BC-610	12		
W6UPY	Stan	Rolling Hills, Calif.	100 watts	15		
K9WAH/	John	Camp McCoy, Wis.	SCR 699	15		
W7IAB	Chet	Seattle, Wash	1000 watts	12		
W6ZBV	Cecil	Pasadena, Calif.	300 watts	26		

Traffic Net News

The Southern California Radio Teletype Society Net operates every Tuesday evening at 7:30 p. m. on 147.85 mc.

Appointments for Net Control for the next two months are as follows:

September 1—W6NWM September 8—W6OQB September 17—W6PNW September 22—W6SCQ September 29—W6RL

October 6—W6WYH October 13—W6ZH October 20—W6AEE October 27—W6BWQ

Any station unable to act as Net Control is requested to get in touch with W6FLW a week before their specified time and Emile will arrange an alternate Net Control. It would be a good idea for each Net Control station to drop Emile a card the preceding week and let him know that they will or will not take Net Control for their evening.

By popular vote on the post card returns for a Net Starting time it is unamimous for 8:00 p. m. So starting next month the Net will meet at 8:00 p. m. instead of 7:30.

Activity for the month of August as follows:

 August 4—W6FLW, N. C.—11 Checkins.

 W6AEE
 W6CL

 W6EV
 W6WYH

 W6KNI
 W6CLW

 W6IZJ
 W6OQB

 W6SCQ
 W6FLW

 W6NAT

August 11-W6FLW, N. C.-7 Checkins

W6AEE W6SCQ
W6EV W6BWQ
W6KNI W6CLW

August 18-W6EV, N. C .- 13 Checkins.

 W6CL
 W6FLW

 W6CAP
 W6KNI

 W6AEE
 W6NWM

 W6CLW
 W6RL

 W6DEO
 W6SCQ

 W6EV
 W6ZH

 W6CYR
 thru

 W6CYR
 thru

August 25-W6FLW, N. C.-14 Checkins

 W6FLW
 W6KNI

 W6AEE
 W6OQB

 W6CL
 W6NAT

 W6CYR
 W6SCQ

 W6EV
 W6RL

 W6IZJ
 W6ZH

 W6DEO thru
 W6CL

W6PNW thru W6EV

RTTY is the Official Publication of the

Southern California Radio Teletype Society

and is published for the benefit of all Radio Teletype Amateurs and Experimenters.

Permission to copy is granted provided credit is given.

For Information regarding the SCRTS contact the following:

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

For Traffic Net Information: W6FLW W6IZJ

For "RTTY" Information:
W6CL
W6DEO
W6AEE

Comments from Readers

"Seems strange to be writing you on the typewriter. I keep wanting to strike the carriage return and line feed even yet for I just got right up from the printer to write this. While I am at it this evening I would like to send some of the data on the set-up here for incorporation in your listing of active RTTY stations."

—Paul, WØCIH, Superior, Neb.

"I thought I would drop you a line in regards to your RTTY set up you have down there. I have been copying you and a few of the fellows that you have been in QSO with back east. I hope to get on the air here soon. Right now I am finishing a Viking II transmitter and after that comes the Freq. Shift keyer."

-William L. Harris, W7NUD/KL7

"I have been working on the 3rd trick and it is so busy I haven't been able to hardly breath. Am in the midst of construction on the terminal unit. I'm going to send you some pictures of that brush distributor."

-73, Jack Gallup.

"Many thanks for yours of 2 July, just received. On 26 July 1130 PST copied sigs from W6PNW 40 meters, QTH then approximately 780 miles south of L. A. Fair DX for daylight. He had a fine signal but QRN was terrific, hi. Guess my TT activities can now be called a success, hi. Yes, intend building the addition to the converter (Jan., 1953 QST) and get rid of the polar relay."

—Dale, W6JIE/MM

"Fine business on the MAB spread in the current "RTTY." I will be looking forward to comment on this subject, as well as any active efforts to try out MAB RTTY."

-Bart, W60WP

"I have done some writing and printing of small papers etc, and I like the layout and composition of RTTY very much. The information that is in them is really the thing, though. I often wonder why we that fooled around with SSB didn't do the same thing, but guess we just are not as well organized. My idea was exactly what you stated in your letter, to feed AFSK into my SSB rig to wind up with the FSK signal which can be used on the lower frequencies.

—I have the filter problem licked now,"
—Sig. KL7ATL.

"I have had to go to the hospital, in with Gangerine in the left foot and a 4 plus Sugar Diabetis that I did not know I had. Puts me here, this stops all extra work for the time being possibly for two months, or more. And if I don't respond to treatments the doc says I'll be a one legged RTTY man."

—E. Doane, c/o St. Joseph Hospital South Bend, Indiana

If anyone has some time they should drop Doane a note. He is an old time and knows Teletype equipment, Ed.

"And I must mention that I have picked up an awful lot of information on Teletype that will come in handy to me from the various articles in the RTTY Bulletins. Keep up the good work."

-Paul. W3NNV

"Hi Merrill, this is a small world. The following news is probably old by the time you read this. The reason? OPNAV#20-P-6, otherwise known as the 'Naval Comm. Bulletin' No. 35 for July crossed my desk here in the Philippine Islands today. Business stopped while I read and reread the following item: 'RATT' and followed the reports of the Armed Forces Day Message reception, with the comments about operation of amateur station W6CMQ."

-Ted.

"I now have my model 12 and hope to be on the air very soon."

—73, W. Bauer

"What freq. are you on with RTTY?

—John C. Rathjen, WØGRH/KH6

"Received your card and copies of the RTTY this AM; am most pleased with them, and would congratulate you on the contents and fomat, very FB. There was no No. 2, is it possible to get one?"

—Ted, VE1DH

Send card for No. 2 which is again available, Ed.

"No activity here but hope soon. Summer will be over one of these days and we can get organized again."

—73, AL, W1HOD

"Many thanks for the back issues of RTTY. They certainly contain a world of information. Would like to have one of the Amateur Radio Teletype Handbooks when they become available."

—73, Jees F. Jones, W5BRQ Handbook to be ready late this year. Ed. "In the April Issue, Bob's article on 'Little Gems' came just in time as I am building a terminal unit, in fact I almost have it completed, only lack the filters. Am looking forward to the August issue."

-73, Neal, W4ZPZ

"Will you please enter my subscription starting with Vol. 1, No. 1. Have read the previous numbers through W8DLT and W8ZM and want them for myself."

—Larry Pratt. W8GRL

"Bob is away on vacation this week so guess you won't hear any RTTY from Detroit for a while. Please send our RTTY to the above QTH."

—Earl M. Osborn, Robt. L. Osborn, W8BL, W8ZM

"RTTY has recently drawn my attention and now its got me fascinated. Where might I get plans or schematics to guide me in setting up a rig?"

-Bill Jablonske, W9NNS

"As the landlord objects to any wires being strung around this establishment it was a hard job in finding a way to put up a skywire that was not noticeable. This was solved by putting the thing in the attic and bending the ends down about 8 ft. on each end. The coax feeder was then brought down thru an inside wall to the hamshack. Went to see W9TCJ at Williams Bay, Wisc. a few months ago. He sure has a nice layout, and what a guy. That fellow has more ideas than anyone that I have ever met. So much for now."

-73, Norm Krohne, W9SKF



.... The new receiver is sure the berries for RTTY, its a forty meter crystal controlled converter working into a BC-453, otherwise known as a Q-5er. Sure is stable and easy to handle, and the forty meter band just covers the entire band spread-W6EV de W6ZH.

. . . OK on your sailing there, that sure must be nice sport. My vacation is all over but may get a chance to get to the shore before the summer is over. rpt before the summer is over. W 2000 guess QRU here now. W9TCJ de

* * * *

* * * *

... On Sundays we get thru re ten thirty p. m. EDST so you can see the only reason I stay over time is because I like this RTTY stuff hi, hi. W9TCJ with W6AEE de W1AW, Newington.

. . . . Who copied that? de RTNET W6FLW-RTNET de W6AEE, that was Bert with 100 Watts, W6CL. RTNET de W6AEE.

* * * *

. . . . Say was there a fellow down there a few weeks ago that was looking for RTTY gear? He and I are the ones that are working on it hi. This is more fun than using fone or code. The exciter here is a reactance modulated Meisner Signal Shifter and the receiver is an HRO 60 and the converter is the one in the January QST. W9TCJ es W6AEE de W7IAB.

. . . . And his home QTH is Milwaukee, in there with WØBP, Beep. Will not be able to stay around this evening Merrill so why don't you and John go ahead? W6AEE and K9WAH de WØ CIH. Superior, Nebr.

. . . . W5ENH. Little Rock and W2JAV and W6AEE de W9TCJ KKKK.

* * * *

* * * *

. . . . Many thanks for this FB QSO. The RTTY gang has not quite been the same without you Stan. W6UPY de W9TCJ. KKK.

"W6UPY is Ex W7LUK, Ex of M A B days. Ed."

W6FXF has finally got ahold of a Terminal Unit and it shouldn't be too long before we hear his sigs.

* * * *

. We all went on a pack trip, took five horses and went 15milesoneday up to a lake 13,000 feet high. Fishing was fine up there. Caught a two pound Rainbow. Not bad for a flatlander. W6AEE with W9TCJ de W3PYW.

. . . . Have been getting a big kick out of this RTTY and very pleased to make QSO with a few stations. Well I guess I had better see how you are copying me before I go too far here. Back to you. W4MOP de W1AW.

. . . . The name here is Chet and the rig is running a KW. The rig winds up with a pair of HF300's in the final. W6 AEE de W7IAB.

* * * *

. . . . Well you drill and tap two holes in the edge of the bakelite mount plate holding the two coils. The soles on the edge are for the two 6-32 screws which you can use to fasten the filter unit to the inside of the National type RO coil form shield can. W1AW de W9TCJ. Getting it from the Horse's Mouth hi, Ed

* * * *

W6BGM completed his station and has a wrong set of gears on the model 12 distributor—goes too fast! But fate again stepped in and Chuck is out of town (Desert City, Calif., about 130 miles from L. A. installing some antennas on Eagle Mountain), so until he completes that task he won't be on the forty meter and two meter bands.

* * * *

. . . Okey Merrill, hope you can print me OK this evening and excuse all the RYRYRYs. I see by the latest bulletin that all this RYRYRY is passee nowwhoops, too many e's in passe but I have to send to tune myself in. W6AEE de WØHKF, St. Paul.

. . . . What do you think of W6JIE's reception of my signals on ship??? Do you know W6JIE? 12212 South Laurel Ave., Norwalk, Calif. de W9TCJ.

Wonder what has happened to Steve. W6ILW and Lem, W6KGS. We know they have sufficient equipment to get on the air, but still no sigs from them.

* * * *

. . . . But he suggested that some of you fellows get the OBS appointment from your SCM and put out the bulletins yourselves. How are you copying me now? W6AEE de W1AW KKKKK

* * * *

. . . Have been busy constructing a ground plane antenna and are more satisfied with the performance of the thing. I am receiving signals about 3 S units better on the ground plane than the old center fed all band antenna. de W6FLW.

W6RL now has equipment going at both his home in Westchester and at his shop in El Segundo. Fine work Shorty.

* * * *

CORRECTION IN MAY ISSUE

On the schematic of the 21A receiving distributor, Page 8, two resistor values were interchanged. The resistor in the screen lead of the 7B7 shown as 2.2 meg. should be 10K, 2 watt, and the 10K, 2 watt shown in the grid circuit should be 2.2 meg.—W6ZBV.