RTTY

Mr. George Mezey, ex-W2KFV, just recently K7NIY, of Sun City, Arizona on his way to the Southwest District Convention of A.R.R.L. in Phoenix on May 27th. The "Old Desert Rat" travels in comfort with his trusty nag and his rig.

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NEWS OF AMATEUR RTTY

APRIL 1961
30 Cents
Vol. 9, No. 4

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: FRA TU with manual, converted to 455/465KC. Bay Area only. $50.00 Doug Beck, W7MQY/6-303 Hiddenlake Drive, Sunnyvale, Calif.

FOR SALE: 455 polar relays, Excellent $3.50 each PP. New chadless tape splicers Teletype, $3.50 PP. 455 sockets 75c Six foot patch cords with RTS plug one end 75c K9CNG

FOR SALE: Rebuilt model 15 .... W9ZTD

Wanted: 0-39/TRA or GRC Frequency shift exciter, or 0-5B FSK exciter W9ZTD
5128 North Sadlier Drive, Lawrence, Indiana

FOR SALE: Model 14 TD, with sync motor, gears for either 60/75 wpm. grey green finish K9BRL

FOR SALE: Terminal units, Filters, custom wound toroids. K9BRL

FOR SALE: Home built TU, similar to Hoffman Radio Corp. TU with built in 'scope. Neatly built with commercial appearance. $75.00 W1RR, 6 Riverside Dr., Kingston, Mass.

FOR SALE: AN/UR 57 Dual diversity TU(RCA) $100.00 Alfred Michaud, K1PAX, 264 East Main Street, Fall River, Mass.

Trade: Typing reperf, model 14H1GH BASE, for non typing reperf Local trade preferred. John Riley, 914 North Cordova, Burbank, Calif.

FOR SALE: Toroids, Q better than 200, complete specs with coils. $8.00 pair, two pair $15.00. Paul A. James, 2228 NW 56, Oklahoma City, Okla.

Wanted: November 1953 RTTY W6AEE

RTTY, Inc.
372 WEST WARREN WAY
Arcadia, California
Return Postage Guaranteed

"ARMED FORCES DAY" Amateur Communications

20 May 1961

The Army, Navy, and Air Force invite all U.S. and overseas radio amateurs to participate in the Twelfth Armed Forces Day amateur radio program on Saturday, 20 May 1961. Co-sponsored by the Assistant Chief of Naval Operations (Communications)/Director, Naval Communications and the Military Affiliate Radio System (representing the Army Signal Corps and Air Force Directorate of Telecommunications) this program has become a traditional part of amateur radio activities.

Each of the three services will offer a special QSL card. This is a unique card because it is issued only once and this is in conection with the Armed Forces Day amateur communications program. Amateurs who participated in the past have found these cards to be colorful, rare additions to their QSL collections.

A second noteworthy award is the certificate presented for perfect copy of the CW code receiving message and the certificate for perfect copy of the RATT message. Specially signed by the Secretary of Defense, these certificates are considered to be collctor's items.

THE PROGRAM FEATURES:

A CW code receiving contest open to any shortwave listener who can copy International Morse Code at 25 words per minute. A message from the Secretary of Defense will be sent.

A radioteletypewriter (RATT) transmission sent by Headquarters MARS and Navy radio stations. A message from the Secretary of Defense will be transmitted at 60 words per minute. This contest is open to any amateur radio operator or other individual who has the equipment capable of receiving radioteletypewriter transmissions.

A military-to-amateur transmitting and receiving test conducted for all holders of valid U.S. amateur radio station licenses. Headquarters radio stations of the Army, Navy and Air Force will operate on spot frequencies outside the amateur bands and establish radio contact with amateur stations.

THE AWARDS PRESENTED:

Each participant who submits a perfect copy of the CW message will be awarded a Department of Defense certificate of merit signed by the Secretary of Defense.

A Department of Defense certificate of merit signed by the Secretary of Defense will be awarded each participant who submits a perfect copy of the RATT message.

A special one-time Armed Forces QSL card will acknowledge radio contact with amateur stations. Each service headquarters will acknowledge separately so amateurs will have an opportunity to qualify for three different QSL cards.

COMPLETE OPERATING SCHEDULES AND COMPETITION PROCEDURES ARE AS FOLLOWS:

Each transmission for the CW and RATT receiving contests will commence at the indicated times with a ten minute CQ call to permit the participants to adjust their equipment. The ten minute CQ will be immediately followed by the message from SECDEF. It is not necessary to copy more than one station and no extra credit will be given for so doing.

Transcriptions should be submitted "as received." No attempt should be made to correct possible transmission errors. Time, frequency, and call sign of the station copied should be indicated as well as the name, call sign (if any), and address of the individual submitting the copy.

Competition entries should be submitted to the Armed Forces Day Contest, Room BE1000, the Pentagon, Washington, D.C. and postmarked not later than 31 May 1961.

CW RECEIVING CONTEST

Time 20 May 1961

Transmitting Station	Frequencies (KCS)
210300Z (2200 EST)	
WAR/AIR (Army & Air Force radio, Wash., DC	3347, 14405, 20994
210300Z (2200 EST)	
NSS (Navy Radio, Wash, D. C.)	3319, 4010, 6970, 14480
210300Z (1900 PST)	
A6USA (Army Radio, San Francisco, Calif.)	6997.5
NPG (Navy Radio, San Francisco, Calif)	3319, 7595, 14927.5
NPD (Navy Radio, Seattle, Wash.)	7455
AG6AIR (Hamilton AFB, Calif.)	7832.5

RATT RECEIVING CONTEST

Time 20 May 1961

Transmitting Station	Frequencies (KCS)
210335Z (2235 EST)	
WAR (Wash., D.C.)	3347, 14405, 20994
NSS (Wash., D.C.)	3319, 7375, 14480
AIR (Wash., D.C.)	7915
210335Z (2135 CST)	
A5USA (Ft. Sam Houston, Texas)	5395
NDS (Great Lakes, Ill.)	7455
AG5FFR (Randolph AFB, Texas)	7305
210335Z (1935 PST)	
AG6AIR (Hamilton AFB, Calif.)	7832.5
A6USA (Army Radio San Francisco, Calif.	6997.5
210345Z (2145 CST)	
NDF (New Orleans, La.)	7380
NDW (San Francisco, Calif.)	3319, 7375
NPD (Seattle, Wash.)	7455

MILITARY-TO-AMATEUR TEST

Military stations WAR, AIR, and NSS will be on the air from 201500Z (1000 EST) to 210500Z (2400 EST) on 20 May 1961 to contact and test with amateur radio stations. Amateur contacts will be discontinued from 210245Z to 210400Z to allow the Armed Forces Day CW and RATT broadcast competition in accordance with the schedule above.

Station Military Frequencies		Appropriate Amateur Band (megs)
WAR (Army Radio, Wash., D.C.)		
4020	(AM)	3.8 to 4
4025	(CW)	3.5 to 3.8
6997.5	(CW)	7 to 7.2
20994	(CW)	21.1 to 21.25
NSS (Navy Radio Wash., D.C.)		
4010	(CW)	3.5 to 3.8
6970	(CW)	7 to 7.2
13680	(CW)	14 to 14.2
14480	(CW)	14 to 14.2
4012.5	(AM)*	3.8 to 4 7.2 to 7.3
14385	(SSB)	14.2 to 14.35
3319	RATT	3.5 to 3.8
7375	RATT	7 to 7.2
20050	RATT** (See note)	
AIR (Air Force Radio, Wash., D.C.)		
3347	(CW)	3.5 to 3.8
7635	(AM)	7.2 to 7.3
14405	(SSB)	14.2 to 14.35
15715	(CW)	14 to 14.2

*Operator transmitting on 4012.5 (AM) will listen in the AM, SSB, sections of the 40 and 75 meter bands for AM or SSB stations.

**NSS will key 20050 KCS simultaneously with one of the RATT frequencies listed above. This frequency will be used as frequency propagation conditions dictate.

Military stations will listen for calls from amateurs within the appropriate amateur bands. Contacts will consist of a brief exchange of location and signal report. This is a test of military-to-amateur communications and no traffic handling or message exchange will be permitted.

Subscription Rate $3.00 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

Permission to copy is granted provided credit is given.

For Information Regarding the Society Contact the Following:

W6AEE — Merrill Swan
W6SCQ — Lewis Rogerson

For Traffic Net Information:
W6FLW W6IZJ

For "RTTY" Information:
W6DEO W6CG W6AEE

TRANSISTORIZED RTTY TUNING UNIT

By PHIL CATONA, W2JAV
400 North Second Street, Hammonton, N. J.

Enclosed you will find a bit of information that you may use . . . you will find a schematic a negative and a chart of an inexpensive yet highly accurate freq. shift and tuning indicator.

The reason for its existance centered around the lack of tuning information when using transistorized gear without resorting to scopes etc., not normally used with such low voltage devices.

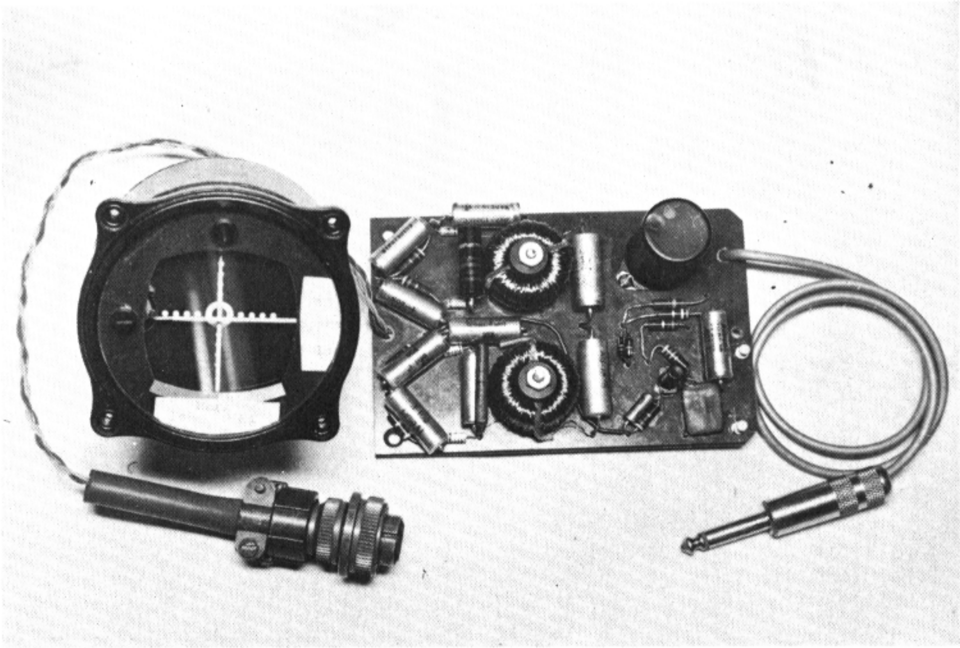
Here is a self contained device that can be used independently from the receiver's output or OSC, etc. that needs only about .2 of a volt to operate . . . the meter used is sure a bargain and a well built affair . . yet it is only priced at about $1.50! It is from surplus I L S gear, about 150 micro amp. per movement, available from Fair Radio Sales Co., 2133 Elida Rd., or from J. Meshna Co. of 580 X Lnn St., Malden, Mass.

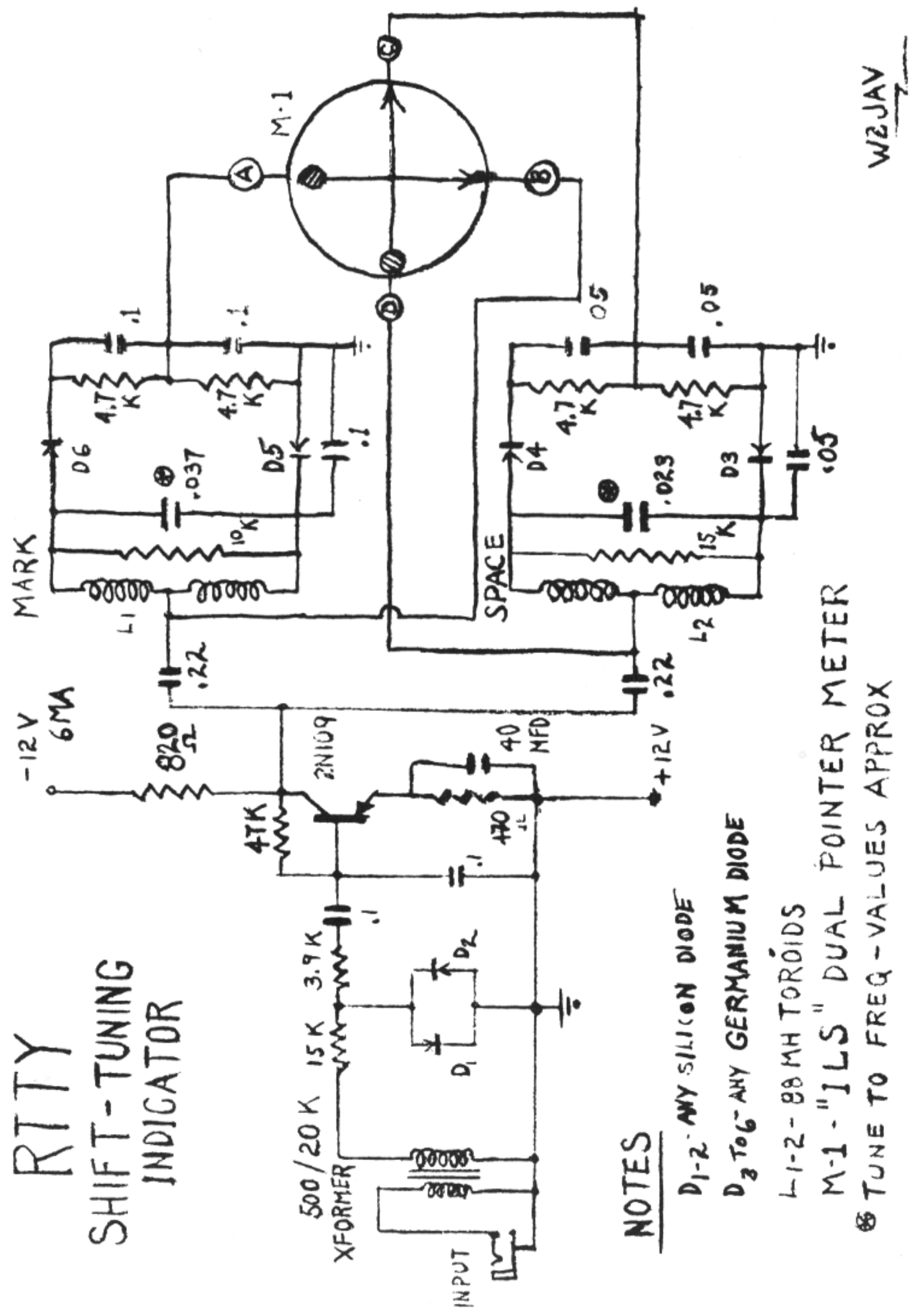
The input Xformer is the popular SSB job MFG by Lionel Corp. that sells for 95 cents. . . type TF 1A19 . . . (600-2500-22000 OHM).

The input consists of a silicone pair of diode limiter, a transistor driver . . . most any audio type will do . . . and a pair of a bit unusual type discriminators using the popular line loading toroids.

The useful range of each scale has been set up to cover about 600 cycles for each scale (mark-space) (center scale indicating 2125 and 2975 on other pointer) there are not confusing cross over points in the usual audio range, and if the meter is marked as shown, it will react as indicated on the enclosed chart.

If you are lazy and don't want to pick the exact values of condenesrs to tune the disc to exact freq., you can put a 10k pot. in place of the 4.7 K load resistors . . . however a loss of linearity could result if pot. are offset too much. So I tuned each to the exact point for M-S.



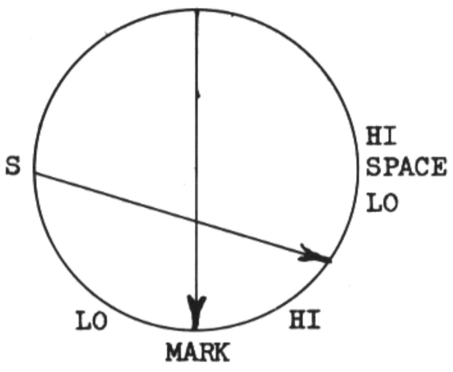


RTTY
SHIFT-TUNING
INDICATOR

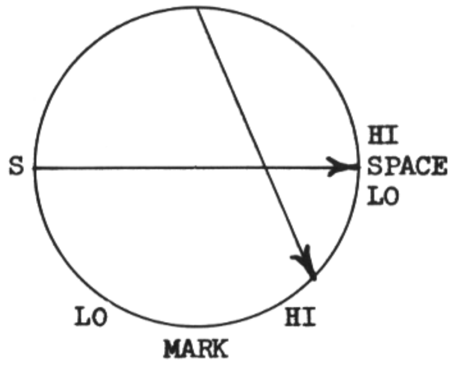
NOTES
D_{1-2} ANY SILICON DIODE
D_3 TO 6 ANY GERMANIUM DIODE
L_{1-2} - 88 MH TOROIDS
M-1 - "ILS" DUAL POINTER METER
⊕ TUNE TO FREQ - VALUES APPROX

ON STEADY SIGNAL

"ON MARK"

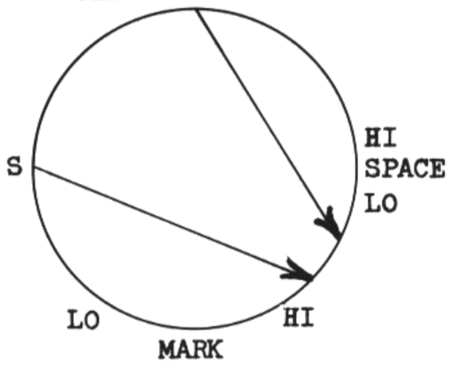


"ON SPACE"

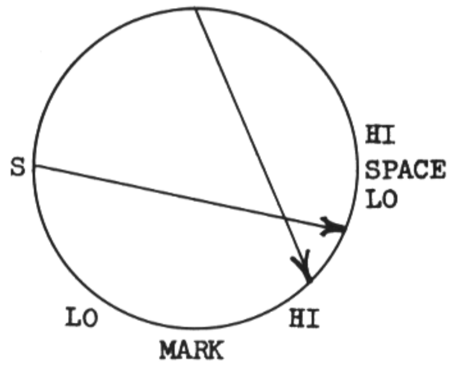


AT NORMAL KEYING SPEEDS

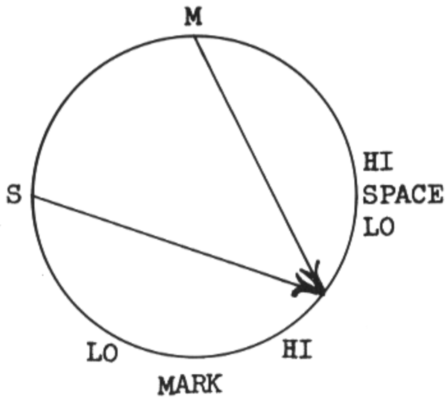
SHIFT TOO NARROW



SHIFT TOO BROAD



PROPER SHIFT



K5QBU RTTY CONTROL

FRED TAYLOR, K5QBU

Edgewater Park Mass.

Here is the circuit diagram of the RTTY control circuit which I mentioned to you during our QSO last fall. This gadget, which was built by the writer with the very able help of K5KPW, allows me to get maximum use of the RTTY equipment at this station, a Model 15 Printer and Model 14 Reperf and transmitter distributor. With this control box I can select any of the following functions.

1. Local Loop for checking and testing equipment.
2. Use either the keyboard or the TD for punching tape.
3. Print incoming signals on the Page Printer of the Reperf or both
4. Use the TD and/or the keyboard for transmitting. This permits stopping the tape at any point to make keyboard corrections.
5. While receiving an incoming signal on the Page Printer use the keyboard and the Reperf to punch tape. This permits punching a tape for my next transmission while receiving.
6. While transmitting with the TD, use the keyboard and the Reperf to punch tape. This way an uncompleted tape can be finished while it is being transmitted.

In fact, with this control system any or all of the equipment can be used individually or together, merely by flipping a switch.

A look at the diagram will show that there are two complete circuits, one of which I call normal, and the other local loop. The various pieces of equipment are switched into one or the other of these circuits in series. When the Printer or the Reperf are in one circuit, a resistor is switched into the other to maintain a constant load on both circuits at all times. For example, when the Reperf is in Local Loop, R-2 is in the normal circuit, and when the Reperf is in normal, R-1 is in the local loop. The same is true with R-3 and R-4 and the Printer. The value of these resistors is determined by the DC resistance of the selector coil which they replace in the circuit. Since my magnets are in series, R-1 and R-2 are 240 OHMS, and R-3 and R-4 are 2000 OHMS. These should be at least 5 watts. Resistor R-5, a variable pot, is used to adjust the current in local loop, either 30 or 60 Mils, again depending on what is needed for the magnets. With my series magnets 30 Mils is used. R-6 is placed between R-5 and the Meter to protect the Meter in case R-5 should short out for any reason. The Meter should be at least 0-60 Mils. of course a shunted one Mil Meter could be used.

You will note that S-2 and S-3 also control the 115 Volt supply of the local loop. Turning it on only when local loop is used. Obviously the power supply must not use tube rectifiers unless the filaments can be on at all times. The power supply used at this station is the REC 10 made by the Teletype Corp.

Switches S-1-2-3-4 are the lever type, though rotary could be used. Find that the lever type make a very neat job, and are easy to flip from one position to the other. Have also installed switches to control the motors of the TD and the Reperf, switches S-5 and 6. Jacks J-1-2-3-4 are the regular phone type, and must be insulated from the chassis.

This unit was built in a 7 x 7 x 10 box which I had in the junk box. Drawing of the front panel is also enclosed. Have this mounted on top of the TD where it can be easily reached from the operating position. The power supply is mounted under the operating table. All jacks are in the back of the unit, including 115 Volt receptacles for the Reperf and TD motors.

Hope that the circuit will be of some use to fellow RTTYers. W5CBW/5, Bob, is using one and has named it the **QBU**-1. When we have a round table going with W5SGJ, also using one, the QSO goes along at a fast clip since each of us punch tape for our next transmission while receiving. It has certainly added to the pleasure I get from RTTY. 73.

FRED

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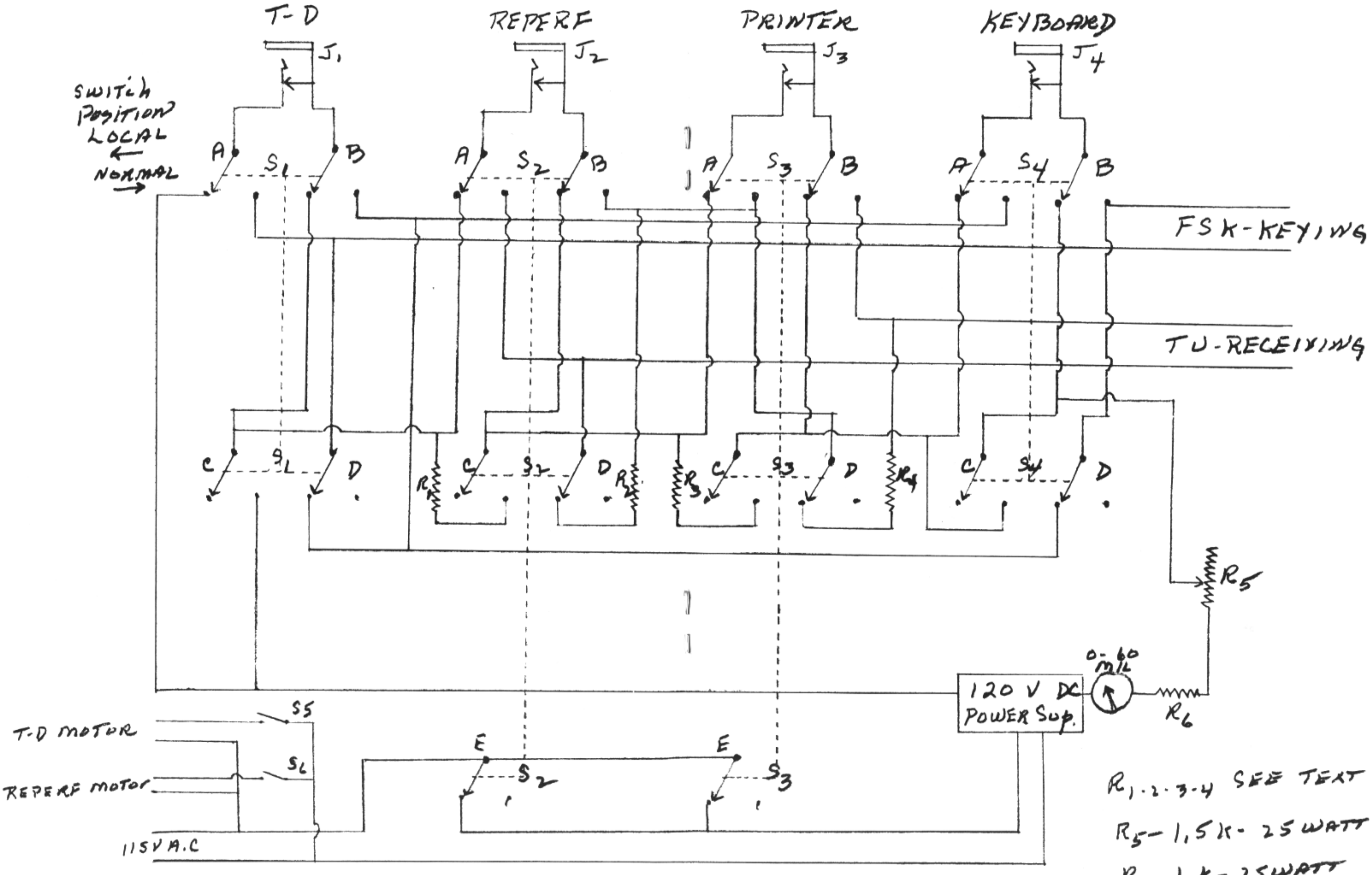
MASTER CONTROL
QBU-1



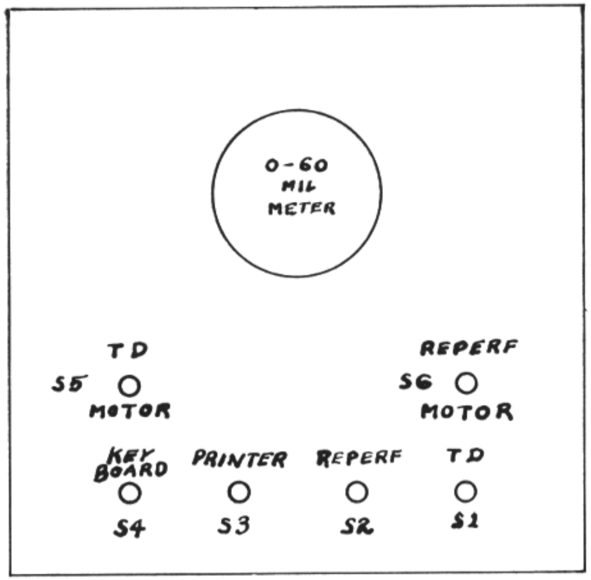
$R_{1\cdot 2\cdot 3\cdot 4}$ SEE TEXT

R_5 – 1,5K - 25 WATT

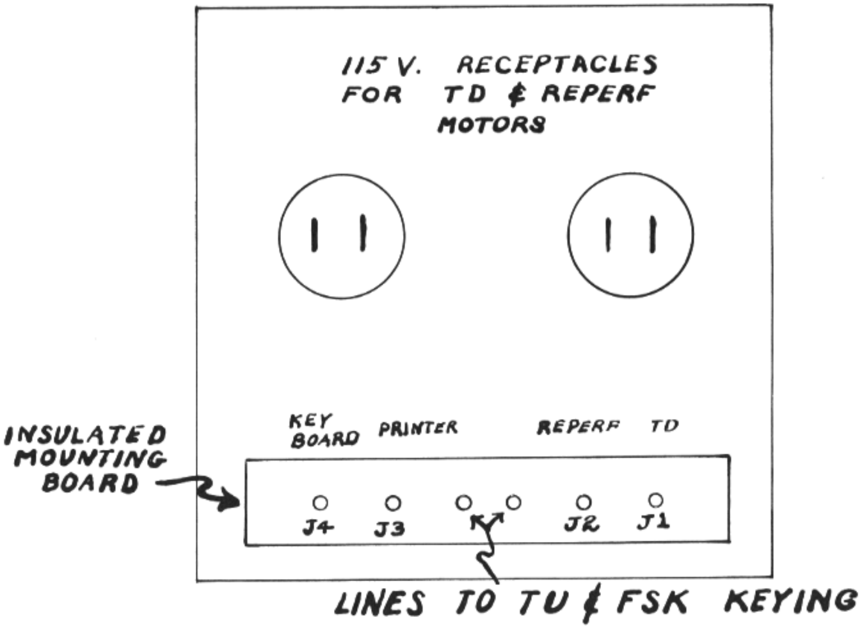
R_6 - 1 K - 25 WATT

QBU-1 MASTER CONTROL

FRONT PANEL



BACK PANEL



DX-RTTY

BUD SCHULTZ, W6CG

5226 N. Willmonte Ave.,
Temple City, California

Hi, Gang: With the SS contests out of the way let's get down to some serious DX'ing. The DX recession seems to be over, at least for the time being, and things are really starting to pop again. Old Nick, KL7MZ, really started things off this month by pointing his beam over the Pole and Putting out a "CQ DX." In his weakened condition (he was laid up with the flu) he was hardly able to cope with the results of his call. Both G3CQE and ZS1FD answered his call and for the next forty-five minutes things up in Rabbit Creek were really in a tizzy. The end result was an epic making three-way QSO which meant at least one new country for all concerned! The distance from Rabbit Creek to Capetown comes very close to equalling the present all-time record made by G3CQE/ZL3HJ in their famous Christmas Eve contact back in '59. Nice work, fellas!! Nick is still in a state of shock but must be starting to come out of it because he did manage to send a new revised list of DX worked to us. It's funny how once that DX poison gets into your system it ruins your whole routine.

Henry, ZS1FD, is still holding forth nearly every day on both 15 and 20 with the same high quality signals. However, by the time this hits the mail Henry and his XYL should be celebrating their anniversary in Europe visiting many of the RTTY group there. Ossie, ZS6CR, received his toroids from Ed, K3GIF, and should now be in business with his RTTY problems under control. Ronnie, ZS1NE, will have to take over for the Capetown Area while Henry is away and judging by the way his KWS-2 comes into the States this should provide a lot of interesting contacts.

My European correspondent Bill Brennan, G3CQE, continues to send in his fabulous reports on activity among the UK lads. Bill reports that G2RF is now in business and looking for customers. Bob, G3GNR, continues to be active and has promised some fotos of his layout. Jim, G3BXI and Bill, G3CQE, have been putting in tremendous signals here on the West Coast and providing nearly solid print every day that they are able to get on the bands. Jim's signal has been logged at 20 DB over S-9 here on occasion overriding even the heavy CW QRM (15). G3CQE comes thru here consistently now on both 15 and 20 for two to three hours at a time. If you need Europe for your WAC-RTTY there never will be a better time than now!!

The lads down under are also starting to show up on both 15 and 20 with much better copy. Eric, VK3KF, and Bruce, ZL1WB, have been showing up on 21 Mcs as early as 0100 GMT with excellent signals. Eric received official permission to operate RTTY on 14,088 Kcs and is now going after a 7 MC permit. Eric reports that he is still trying to get VK2AAB fired up for FSK. We received an interesting, enthusiastic letter from VK2EG (ex-VK1EG, VK1BS) stating that he and VK2AIR are busy trying to round up enough TTY gear to get under way and have already filed for permission to use RTTY. Looks like the SPRATS will be getting some new recruits. Still no word from Alec, ZL3HJ, since he stopped punching sheep and moved to Christchurch. What's the good word, Alec?

Nothing new reported from South America this month except that several PY stations have been logged on RTTY but they move around the band so fast that they have been tough to pin down. Monty, HC1JU, promises to be on RTTY as soon as he returns from his Galapagos DXpedition (HC8JU).

Sorry to report that there has not even been a rumor this month concerning anything from Asia. VU2NR is the best prospect at the moment but is still trying to get all the necessary gear from the States. By the way, in answer to several inquiries, for DX-RTTY credit KL7, KH6 and VO1 will be considered as countries until January 1st-1962. This is being done to encourage DX interest among the green key gang. However, on that date we will revert to the official ARRL DX list for country credit — a word to the wise etc.!!

Now let's take a minute to explore the DX angle of the recent SS contest. While the contest was a howling (?) success and some of the overseas lads did very well, in general it was a great dissappointment to the majority of them. My correspondence from them shows that this was due to a number of reasons. By far the most common gripe from the DX lads was the policy of the Stateside stations moving in to get a QSO with them and then after exchanging numbers the Stateside Chap would sit on the frequency and work four or five of the other W stations who were hovering around the frequency hoping for a crack at the DX. In desperation the DX was forced to move to another spot and work up a new "clientele." After one or two exchanges the same situation would prevail and again the DX station had to look for greener pastures. Because of the fact that the bands were only open to some of these far-a-way places for only an hour or two at the most, it left those chaps with a total of three or four contacts when they could have had twelve or twenty in the same amount of time. Most of the letters from these DX chaps acknowledge the fact that now that there is so much activity in DX they would like some sort of arrangement that would give them a better "shake." Part of the problem stems from the fact that the contest rules are such that I get just as much score from working a station in the San Diego Section as I do for working ZK1BS in Rarotonga. Furthermore, I can probably work San Diego much quicker than I could by fighting the pack for ZK1BS and if I am out for a big score this is the logical thing for me to do. However, it does not follow that I should sit on top of ZK1BS while I am swapping numbers with the feller in the next city. Everyone concerned would be better served if I would give the San Diego station a quick "QSY" and work him a few KCs off the DX frequency. What it actually gets down to is a matter of ethics or just plain old fashioned courtesy. In the frantic excitement and enthusiasm of a contest all of us are apt to overlook these little courtesies, that we normally extend to the other fellow, in our mad dash to get an extra multiplier or two.

It seems to me the logical way to overcome this situation would be to allow an extra multiplier for each continent worked and thus it would pay a bigger dividend for the fellows who are out to make the biggest score to "dig down" and look for that lad on the other side of the Ocean. Eric, VK3KF, came up with still another suggestion which was new to the contest committee. Eric suggests that we move one of the SS contests to an earlier or later date when it would fall in a better DX period. He suggests mid-October as one possibility. It is not possible to move the February "Anniversary Sweepstakes" because the very idea of this contest is to commemorate the beginning of RTTY. However, the committee is considering moving the November Contest to Mid-October (if a suitable date can be found that doesn't interfere with other contests) and amend the rules to give the DX stations a better deal. The February contest would remain as it is at present.

I hope lots of you DX fanatics will let down your hair and send me your ideas on the subject. I won't guarantee to answer 'em all but they will all get an honest evaluation by the contest committee. Sorry I took so much time this month but the boss wanted to get this contest thing settled while it is fresh in everyone's mind and actually October will be here before we realize it. Start throwing those brick-bats fellows; I can take it!

73 and BCNU next month (I hope!)

Bud W6CG

AMATEUR LICENSING RECIPROCITY TREATIES

EROSA IRABIEN XE1B1/XE1UNM

Mexico has never legally granted amateur licenses to aliens but in many cases amateur operation has been permitted as a courtesy to foreign visitors. At this time there is a trend to sign reciprocity treaties with other countries. It is interesting to note that Costa Rica, Venezuela, Ecuador, and Peru have sent letters to the LMRE regarding this matter. These letters have been sent to the S.C.T. and a reply is expected soon. During the past week a U.S. Senate Commission came to Mexico and met with a group of English speaking hams on this subject and the interviews were quite successful. Some of the senators were optimistic and some were indifferent but Dennis Chavez, Senator from New Mexico, (sometimes called "The Best Friend of Mexico") gave the idea his approval and asked for more copies of the findings for the use of all the other Senators in the states. Chavez promised to try and get approval of the reciprocity treaty as soon as possible.

Recently a French citizen, Pierre Wolf, was granted permission to operate his amateur station in Mexico. His license was granted less than three weeks after the REF and French authorities forwarded a letter to the Mexican government and the LMRE on the subject. The letter from the French authorities also stated that in reciprocity any Mexican citizen in France requesting an amateur license would be accommodated. . . .

Enclosed find pictures of RTTY Booth and Technical session at West Gulf Division Convention on above dates, however, we realize this is not current news but in as much as pictures were taken by an amateur photographer and who is a very busy man we couldn't criticize too much the delivery but thought they would be of interest to you even though you might not wish to publish them.

There was a nice attendance at RTTY session at which our good friend W5ANW was speaker copy of which you carried in one of your recent issues, at this session we had Ray Bibb W5YQH answered questions on maintenance of Model 15 machines. (around 55 attended this session.) 73.

D. O. "Cuz" Jones W5QEO

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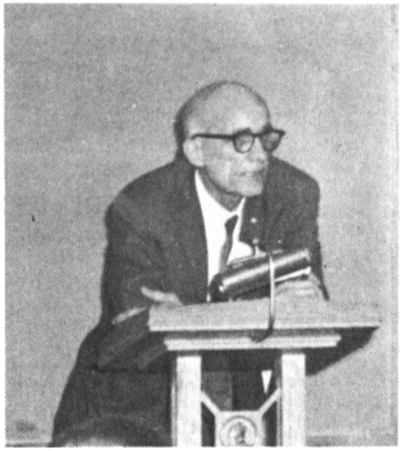


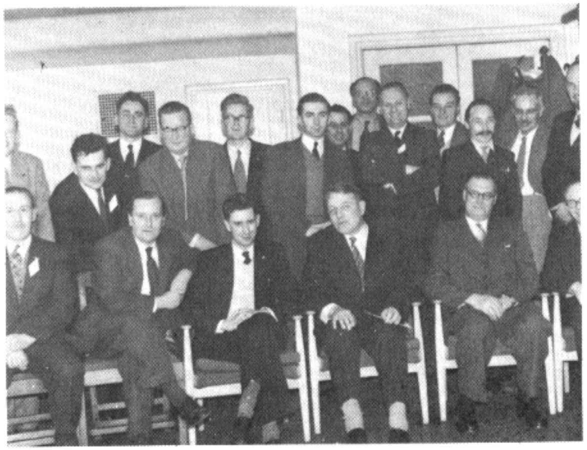
RECEIVE AWARDS — Dr. Tom Lipscomb, W4RTJ, on left, receives Public Service Award from President Dr. Albert Reilly, W4WMN, center, Fred W. DeMotte, W4RWM, (right) receives an "outstanding contribution Award," at Florida RTTY Society Annual Meeting, in January at Daytona Beach, Florida.

We had a wonderful meeting and several fine demonstrations and talks.

The following officers were elected; President — Dr. Tom Lipscomb, W4RTJ; Vice-President — Jerry Starr, K4PMF, and re-elected Secretary for a third term, Fred W. DeMotte, W4RWM.

Board of Directors; Dr. Albert Reilly, W4-WMN; Ches Watkins, K4KKZ, and Milton Curry, W4FZV.

"BARTG GROUP MEETS IN LONDON"

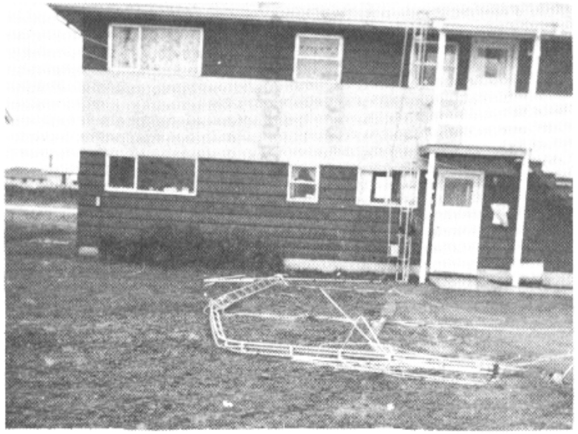


Front (L to R) G311R, G2UK, G3CQE, PA0FB, G6NZ, G3BST
Back row (L to R) G3GNR, G3FHL, ?, ?, ?, G3LEF, G3BXI,
G3BDH, ?, G3LCY

W. M. JACKSON, W4ILZ
Post Office Box 51
Savannah, Tennessee

The equipment here consists of a Heath Apache transmitter running about 150 watts; A Collins 75A3 receiver; a Heath SB-10 for single sideband; a Heath VF-1 VFO modified for FSK; a W2PAT FSK converter; a model 15 page printer; a model 14 transmitter-distributor; a model 14 keyboard perforator; a HRC receiver; and a Super-Proc receiver.

W. M. JACKSON, W4ILZ



VE7YC(exVE6UB) ANTENNA AFTER STORM