



NEWS OF

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AMATEUR RTTY

September 1961 30 Cents Vol. 9, No. 9

RTTY

HORSE

TRADES

FOR SALE: 15/32" Oiled 1
Stony Point Rs
WANTED: Sync motor for
Drive, Rt. 1, L
WANTED: Model 15 or 19)
Model 15 or 19)
Model 12 typin one Tape. W6DOU, 3154
unta Rosa, Calif.
1 15. K5DNH, 200 Charles
e, Louisiana

roll FOB. W7WKP,)-10 and 19 key-li-Fi Items, Sell

FOR SALE:

NA. TU. S20.0. KY/UR Tone keyer S35.00. SMLA. 6017 Mayflower, Maywood, Callf. odel 401-A printer, less motor S10.00. TG-30 peater, new less power supply S15.00 pick up by, K8DDC, Box 251, Chillioth, Ohio. edel 14, marrow tape printer for SSB gear citer/VFO capable of powering Globe King. SBDJ, 1214 South Alvord Blvd., Evansville 14,

FOR SALE: FOR SALE:

w 450TH or 1000T type tubes, will trade is, 4-400As, or good model 14 TD or eash, B/6, 68 Laurel Ave., Yuba City, Calif, 14 typing repert or kybd perf. W8KPT. 15 printer and table. Also Kleinschmidt W8KPT. 2537 McVey Blvd., WEST. Model 15 \$110.00, Model 14 key.

D. Model 14 typing reperf \$165.

reperf with kybd \$180.00, Model perf less TD \$165. K7HGD/6, in Francisco Calif. or kybd perf. W8KPT. able. Also Kleinschmidt McVey Blvd., WEST,

WANTED: FOR SALE:

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

> 372 WEST WARREN WAY
> Arcadia, California Inc.





MANUAL TAPE KEYBOARD ENTRY INTO TYPING OR NON-TYPING REPERFORATOR

F. A. Hatfield, K8VDU 4080 East Fulton St., Columbus 13, Ohio

I recently requested a 14 T-D, typing reperf and a 15 printer-keyboard for the preparation of program tapes in our laboratory. Through unfortunate circumstances, everything arrived except the model 15. Since it looked as if the making of our tapes would be held up, I hastily assembled the following control box providing manual entry into the reperf. This set-up is suitable for us since our program tapes are not very lengthy and we can use the typing reperf feature for verification. This unit might be of interest to some readers as a cheap and simple way to make tapes if they lack a keyboard. Although the process could be tedious for extensive use it does have the benefits of occupational therapy and a surprisingly rapid familiarity with TTY coding!

In order to use the distributor feature for both normal tape reading and manual entry, the power to the lower (marking) contacts must be removable. This is accomplished by unsoldering the connecting lead from the stop segment to the common connection on the lower contact bus. Be sure the lead you remove is not the lead to terminal 3 since this will prevent power from reaching the reader contacts at any time.

Solder individual leads to each segment on the distributor plate *including* the stop segment. I soldered them directly on the rivets beneath the face plate. Bring these leads out of the T-D to a Jones plug, octal plug, or whatever your favorite means of interconnecting might be.

Next, bring power and control leads from the T-D terminal strip as shown, this will place all control functions on the control box so that operations can be handled at that point.

The control box contains a line adjusting potentiometer so that the selector magnet current can be set for whatever you desire.

To operate, set the line potentiometer for maximum resistance, turn on the D.C. power and adjust line current to proper value. If manual entry is desired, throw switch S, into the open position. This removes power to the marking contacts and allows external

control of the clutch magnet. Obviously, the T.D. tape switch should be on for this operation. Set keys A, B, C, D and E into the proper combination for the code required. Push the operate switch and the clutch magnet will release the commutator, allowing the inserted code to be signalled to the reperf.

Of course, if the operate button is held down, the same code will pass into the signal line constantly. It is not too difficult to "squeeze" one read only with the operate button.

When you want to read tape, throw switch S, to the closed position and the reader will operate normally. In this case, tape control is passed back to the T.D. in the normal manner.

J, is a jack for receiving keyboard signals, (if and when ours arrives, HI). No doubt, elaborations of this basic idea are possible so the ingenious RTTY'er will be able to modify to his heart's content.

This could present an efficient way to re-copy tapes, making corrections and additions at the proper points. Since the T.D. tape switch is left in the "on" position, throwing S, will start or stop the original tape and allow insertions to be made either manually or by keyboard.

There is room inside the tape reader (behind the rear bracket) to mount a terminal board with the 5 diodes. This also makes a convenient point to disconnect the leads going to the contact terminal and transfer them to the board.

To avoid a rough job finding the retaining nuts that drop off when you remove the 5 leads, turn the T-D on it's side with the bolt heads facing up. You can now insert a long stick about $\frac{1}{16}$ square underneath the terminal strip, holding the nut in place while you unscrew the bolt.

Remove each bolt so that you can disconnect the terminal lug. Be sure to put the bolt back in and capture the retaining nut once the lug is removed. After the bolt is back in place, you can remove the stick and repeat the operation on the rest of the leads.

The spring lug will pull out as soon as the bolt is loosened, so be sure to note it's position before you begun. I had no problem in getting them back in position.

It is also a good idea to tag the leads as you remove them for later identification.

Connect 5 wires to the contact terminal strip, holding the spring lugs in position while you tighten each bolt. These wires should be long enough to reach the diode terminals on the board.

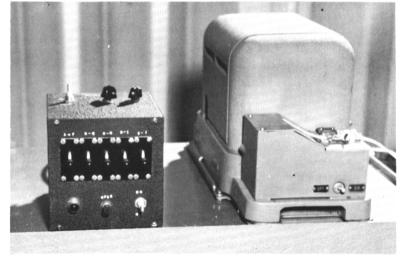
The previous 5 leads from the distributor segments can now be connected to the terminal board. I mounted mine in an upright position so that the lugs would fit at the bottom thus requiring no additional lead length. The latter leads going to the terminal strip can be brought to the upper part of the terminal board and connected.

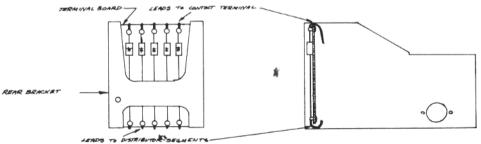
You should now have a diode in series with each distributor segment, preventing feedback between segments when the distributor is in operation.

In operation, tape can be read normally when S_i is in the closed position. If it is desired to insert a correction or additional information, S_i is opened. This transfers control to the operate push button. The reperf will now accept signals from either keyboard or the manual keys.

To use the manual system, throw the keys into the position desired and then operate the pushbutton. The original tape will step each time you insert a manual code to the reperf, so this should be taken into consideration. I found the stepping feature convenient when correcting misspelled words or removing extra characters.

If the keyboard is used for insertion, the tape remains stationary. This could be an optional feature since it would be simple enough to bridge the operate switch from the keyboard in some manner.

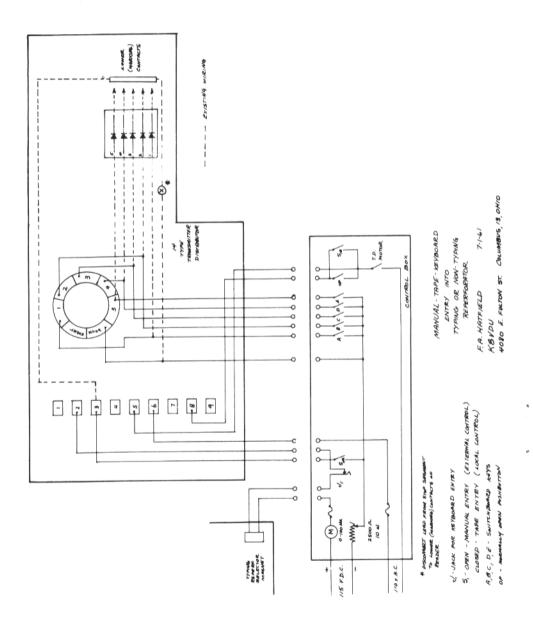




REAR

TAPE READER

SIDE



THE EFFECT OF BIAS AND DISTORTION ON TELETYPE RANGES

By G. E. Hoffstetter K4AV - AA4AV

The purpose of this paper is to explain the effect of spacing bias, marking bias, and distortion, on the range of a teletype machine. In order to thoroughly understand this explanation, the selecting mechanism will be covered briefly.

The teletype is a start-stop machine in which phasing is accomplished by stopping the receiving cams once every revolution of the shaft, and releasing it in phase with the sending cams when a start pulse is received.

The send shaft is equipped with a set of six cams, one opens and closes the startstop contacts, and five that open and close the five intelligence contacts. When the intelligence contacts are properly adjusted each contact remains open or closed for a period of 22 milliseconds. The start-stop contact will remain closed until another key is depressed. When it is properly adjusted. it too will open for a period of 22 milliseconds before the leading edge of the first pulse is received. When the cam is set in motion, then, each pulse, including the start pulse, has 22 milliseconds in which to occur. This time does not change and always maintains a definite relationship to the beginning of the start pulse.

The receiving shaft carries an assembly of five cams, one for each intelligence pulse. The receiving shaft rotates slightly faster than the sending shaft, and the cam assembly is stopped at the end of each revolution and does not start again until another start pulse is received. When a start pulse is received, the cam rotates in phase with the sending cam.

The idle position of the receiving cams, with respect to their respective selector lever, is adjustable by means of a range arm. This arm has a pointer and can be swung from one end of a range scale to the other. The scale is marked from 0 to 120 points. When a printer is properly adjusted, it should printwithout an error, when the pointer is at any point between 20 and 90.

The selecting mechanism consists of the magnet coil, armature and armature exten-

sion, cam assembly, assembly of five selector levers and swords, an assembly of "T" levers and five code bars.

Figure 1 shows a cam, selector lever and sword. This view shows how the sword and selector lever fit together. This shows the cam fully operating the selector lever. The lever moves about its pivot and pulls the sword away from its normal position.

If the magnet armature is in its unoperated position when this occurs, the sword will come in contact with the spacing side of the extension, and the tip of the sword would be moved to the right. See Figure 2.

When the cam has passed the selector lever, the spring pulls the lever back to its normal position, driving the tip of the sword against the right side of the "T" lever, causing it to move to the left. As the "T" lever is engaged in a slot in the code bar, the code bar is moved to the left. See Figure 3.

Figures 4 and 5 show the action for a marking pulse.

With an unbiased signal, and a properly adjusted printer, the cam should engage with its respective selector lever during the 22 ms allotted to that particular pulse if the range arm is set on 20, 90 or any point in between. Figure 6A shows the range centered. If the cam passes this point at the time a marking pulse is being received (magnet armature an its operated position) a mark will be set up in the printer. If a space is being received at this time, a space will be set up in the printer.

Figures 6B and C show the range arm set at 20 and 90 respectively and the cam sampling the pulse at both the leading and trailing edge. Under these conditions the printer will operate without error.

When all spacing pulses are of the same length and longer than normal, the signal is said to be biased to the spacing. Lets see what effect a spacing bias has on the printer range.

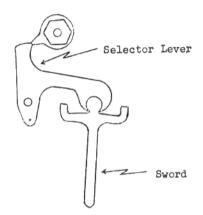
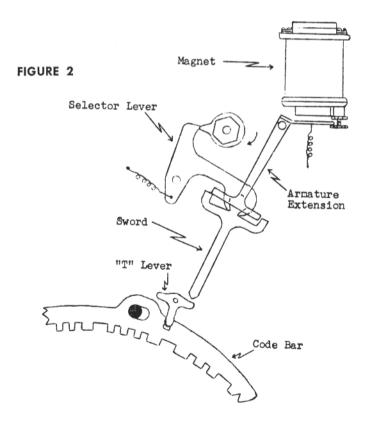
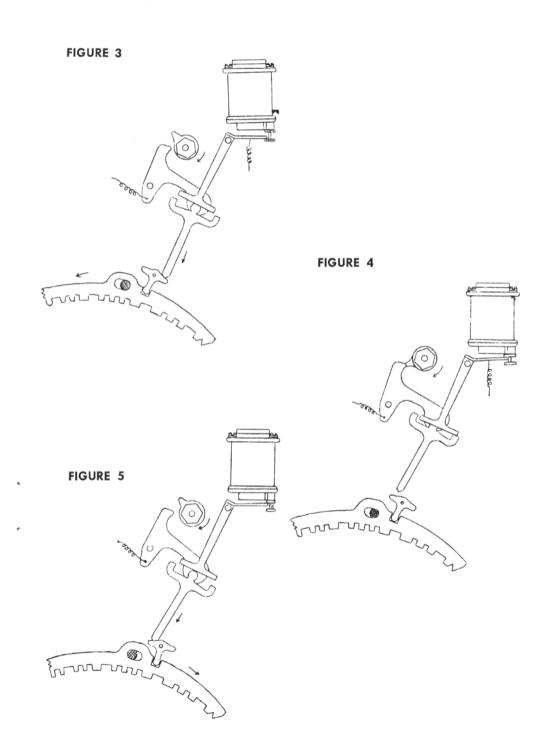
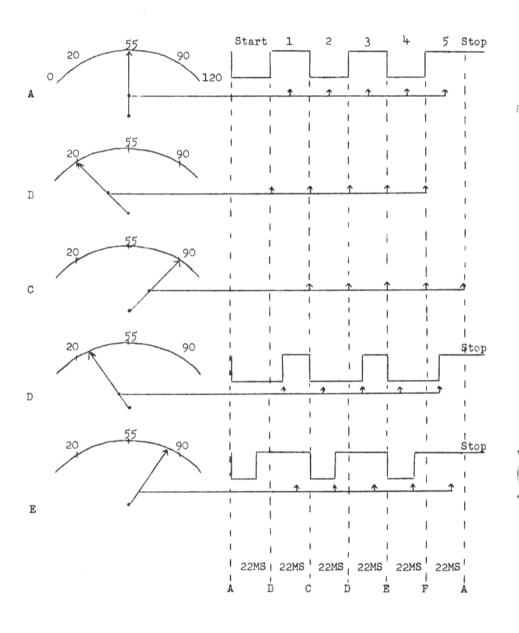


FIGURE 1







RTTY

FIGURE 6

Figure 6D shows such a signal. It can be seen that the desired pulse will be set up with the range set at 90 as was the case when a centered signal was received. Looking at the other end of the range, however, we see that we must move the range arm to bring the cam in a selecting position when the marking pulse is received. From this, it can be seen that a spacing bias raised the lower end of the range.

When all marking pulses are of the same length and longer than normal, the signal is said to be biased to the marking. Figure 6D shows such a signal. In this case the desired pulse will be selected with the range arm set at 20 but it must be moved down from 90 to bring it in a selecting position. Therefore, a marking bias will lower the top of the range.

Looking at Figure 6D closely, you will see that, in the case of a spacing bias, all spacing pulses are longer than 22 ms, therefore the full time allotted to a spacing pulse is effective as a spacing pulse, the remainder (over 22 ms) extends into the next time area and, if the range arm is not high enough on the range scale, a spacing pulse instead of the desired marking pulse will be effective. From this it can be seen that with a spacing bias a marking pulse can be lost, but cannot be gained. Restated, with

a spacing bías, the marking pulse only is effected.

Figure 6E shows that all time allotted to a marking pulse is taken up by a marking pulse, and the proper selection will be made with the range arm set at 20. As the time added to the marking pulse shortens the preceding space, and a spacing pulse is to be received, the range arm must be set below 90 or the printer will select a mark instead of a space. As all time periods allotted to marking pulses receive a full pulse, marking pulses will not be affected by a marking bias. The spacing only will be affected.

Making another observation it will be seen that, in the case of a spacing bias, a mark can be lost only if it follows a space. In the case of a marking bias, a mark can be gained only if the desired space if followed by a mark.

When the length of the pulses vary, the signal is said to be distorted. At one time the spacing will be longer in which case we must have our range arm above 20 to print, and at another time the marking pulse will be longer at which time our range arm must be below 90. Therefore, while spacing bias raised the lower end of the range, and marking bias lowers the upper end, distortion moves the range inward from both ends.

EAST COAST RTTY NET . . .

This net meets every Wednesday evening the year 'round at 24ØØ hrs. Greenwich Mean Time − this comes out to be 19∅∅ hrs. EST during EST and 2000 hrs. EDST during EDST-and generally lasts two hours until Ø2ØØ GMT. The purpose of this net is to stimulate RTTY activity on the Eastern Seaboard, make new friends via FSK SW RTTY, to pass traffic if any and to exchange general comments. Procedure is to call each regular station into the net by call area followed by general calls for non-regular members. Any station failing to call in three consecutive Wednesday's in a row will be automatically dropped from the roll-call by the N C S.

Regular members in the roll-call as of this date are W2EXB, W2JAV, K2MKQ, W2-OKO, K2YZD & W3TLA, along with K2SKK. Inactive members are W1BGW, K1CLF, VE2ATC, W1OUG, W2JCM, W2KFO, W4IAA/2, W3CRO and W3PYW. Don't

know where they went, but suspect summer activities has taken them away.

NET CONTROL at present is K2SKK. It has passed from W3PYW to W1BGW to W1OUG to W2JCM to W1VSA and finally to K2SKK! Hap, W1VSA, is presently moving to a new QTH in Vermont and will be QRT until next September. So, K2SKK "volunteered" to NCS the net in his absence.

THE EAST COAST RTTY NET is open to any RTTY station that is printable on 80 meter 3620 KC RTTY frequency. Feel free to check in any Wednesday night or drop a post-card to K2SKK letting him know to be on lookout for you! Call in three times in a row and you get on the roll-call. We are looking for regulars — especially from W1 and W3 areas. What say, fellows?

Paul B. Boivin, Jr. K2SKK

DX - RTTY

Bud Schultz, W6CG 5226 N. Willmonte Ave., Temple City, Calif.

Hi DX'ers

This is probably the first time in history that a DX column was ever assembled from a hospital bed. Here in the hospital I am what is known as a "retread" because this is my second tour of duty in less than a month. However, thanks to airmail letters from G3GNR, G3COE, K3GIF, W6NRW, ZL3HI, etc. I have enough good info for three columns so here we go!!

From K3GIF's letter comes the following DX dope: Jim, G3BXI is back on with a new HT32 which lets him hop from band to band in no time, at all. Iim reports that things are a bit quiet in England and he hasn't been hearing much American RTTY activity due to poor band conditions. Henry, ZS1FD, is back home and has resumed his regular skeds with Ed. Henry reports that Ron. ZS1NE, is back on the active list with a new Kleinschmidt printer which is his pride and joy. ZS6CR is still having TU problems but Henry is going to try and give Ossie a lift on this one. ZS1FD heard both sides of a OSO between Eric, VK3KF and W6TPI on 14MCs about 0700 GMT so is hoping to set up a sked with Eric in the near future. Ed reports two newcomers to RTTY in the person of KZ5DS and KZ5GA, Dale, KZ5DS, is running an HT37, Ouad, W2JAV/W2PAT converter and a model 19. He operates both 15 and 20 meters on RTTY. George, KZ-5GA, is using Gonset Gear and a single channel TU, KZ5KR and KZ5IT are also expected on FSK shortly, Edwin, PY1KU is keeping active on 20 meters on Friday nights and is still dishing out So. American contacts for those trying for their WAC-RTTY Awards, Phil, W2IAV, visited VE2-ATC in Montreal and says that Lou has a real swell set-up and the best DX location he ever saw!!

Bob, G3GNR, writes that he had to partly dismantle his set-up in order to give the local radio club a demonstration of the wonders of RTTY! He is building the diversity unit described in the July issue of "The Short Wave Magazine" to go with his new TU. Speaking of the "Short Wave Magazine"if any of you are interested in a real fine Amateur Iournal a remittance of \$5 to 55

Victoria St., London, SWI, England will bring you 12 big issues. This, of course. gives you access to the fine RTTY column written by our good friend G3COE along with many other fine features and technical articles. The last word I had from Bill, G3-COE, reported that he was hoping to make a short holiday trip to Holland and have an "eyeball" OSO with Jan, PAØFB, Hope to have more details on this in the next column. Also of interest is the fact that Doc Gee. G2UK, is writing a quarterly RTTY feature for the RSGB Bulletin, the first of which appeared in the July issue. Thanks to the fine efforts of G3COE, G2UK and the many other members of the BARTG it would appear that RTTY is very well established in the UK at this time.

Alec, ZL3HI, is changing his TU over to a W6NRM-Mark III type and says he is arranging to have the entire period of the October World-Wide SS contest away from work and is expecting to operate all bands during the test. Here's a quote from Alec's letter: "-those of us who have a low country score should be able to 'make hav' during the SS. It appears that there are many more coming on RTTY in the U.S. because in one afternoon I worked 3 new ones, two of whom it was their first DX contact." Alec is sending his Creed reperf to ZL2AFZ who will be a welcome addition to the RTTY group. George, ZL2AFZ, has been one of the outstanding CW DX'ers for a long time. Nice work, Alec!

Bob, W6NRM, says that he received from VK3KF a sketch of a design for a blazer shield for "The Knights of the Mark Three". It's an RTTY club with all honors, status, and rank, for those people who have built up the Mark III TU's, Sounds like a great idea, Bob.

Well, Fellas, the nurse just told me it's time to get my shot and turn out the lights and after nearly a month here I have learned it never pays to argue with a nurse. You always get it in the end. CU next month from the listening post on Willmonte Ave.

> BCNU 73 Bud W6CG

A "ZS" AMATEUR IN FRANCE

Paris June 21st, 1961

Mr. Bud Schultz W6CG 5226 N. Willmonte Ave. Temple City, Cal.

Dear Bud, and Mary not to forget,

The womenfolk are off shopping and I want to use the quiet moment to tell you about meeting some of the fellows over here. I shall be back in Cape Town early in July but do not think I shall find the time for much letterwriting. Also I hear that the bands are stone-dead and thus do not expect to work you boys till November or so.

I was in London towards the middle of April. Bill G3COE and Bob, G3GNR came to town to meet me and we spent a very enjoyable afternoon and evening together. Bill brought along an input filter which Ed K3GIF had sent to him for me and I have been carting the darned thing with me all over Europe ever since. I intended visiting Bill in Norwich but could not make it due to unforeseen business engagements. Also I scratched through the surplus market for a new and more compact printer, but no luck. I came across a bunch of Siemens & Halske tape printers, but did not care for them. The surplus situation over there is coming more or less to a dead end and as far as RTTY material is concerned, printers are snapped up by the computer boys to be used as read-out devices and thus the price is much too high for amateur use.

From London I went to Switzerland and then to Italy to pick up a small car from the Fiat factory. It is one of those affairs driven by a weasel on a treadmill and thus doing 42 miles to the gallon at 65 miles, which is quite some speed. Gas is very expensive in Europe, you may know. We cruised around for 3500 miles and wound up in Amsterdam, Holland. I left my wife there and drove to Rotterdam to have the car shipped back to Cape Town from there; on the way I stopped at the Hague to look up Ian PAØFB. This sounds pretty easy but wasn't as he is pretty deeply hidden, opposite the U.S. Marine Headquarters, who viewed me and the car with suspicion because of its strange registration plates.

Jan is a very charming fellow and we spent a most enjoyable half hour together. He is using a Siemens & Halske tape printer of extremely compact construction, with a built-in TD. His interests are far and wide, to name only long distance TV reception. As different countries in Europe use different standards, he has quite an array of TV sets in his shack. He is also very active on VHF and is planning tests on meteor scatter propagation. The time passed too quickly, but as I had to be on my way, we did not have time to explore all the many things of mutual interest.

I have not met too many amateurs on my trip. Those I did meet had never heard of RTTY . . . Here in Europe it seems absolutely hopeless to get hold of printers, except for members of the various armed forces, and that only in a round-about way. I would say that you cannot expect much more activity than at present. Jan PAØFB told me of an LA station having received temporary permission, but that seems about all. I don't think it is appreciated enough on your side over there under what difficulties the average European amateur has to struggle. No components, very little surplus if any, most receivers are home-built and some of them are excellent. A 75A4 over here is strictly Cloud 9, if you know that expression. With all that, RTTY is just not in the picture.

Please give my kindest regards to Merrill and Ed K3GIF and conditions permitting I shall look out for you on my return home, and of course yourself as well. 88 to Mary.

Yours sincerely

Henry, ZS1FD

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and is published for the benefit of all RTTY Amateur and Experimenters

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W6DEO W6CG W6AEE

RESULTS OF ARMED FORCES DAY 1961

Amateur radio operators are to be congratulated for their excellent performance on Armed Forces Day 1961. The operating skill, technical know-how, and patience of the amateurs established new records in all phases of the communications activities. The total number of QSO's and competition entries far exceeded expectations. AIR, USS, and WAR contacted 4246 U.S. and foreign amateurs.

The colorful one-time only QSL cards have been mailed to all contacts that could be identified in the "Callbook." Some cards have been returned as being unclaimed at the address listed. If you contacted either NSS, WAR, or AIR on 20 May 1961 and have not received your QSL, you may write

to the Armed Forces Day Contest, Room 5B960, the Pentagon, Washington, D.C., for a confirmation.

Certificates of Merit have been mailed to 736 contestants in recognition of making a perfect copy of the Secretary of Defense's International Morse Code message to radio operators on Armed Forces Day 1961. The message was transmitted at twenty-five words per minute by military stations on 20 May 1961.

The radioteletypwriter receiving competition featured a message from the Secretary of Defense transmitted at sixty words per minute. A total of 537 contestants submitted a perfect copy and have received their certicates.



RICHARD ZIEHL, K2ECQ, PHILLIP CATONA, W2JAV



FLOYD ZIEHL, W2RUI, FRANK WHITE, W3PYW

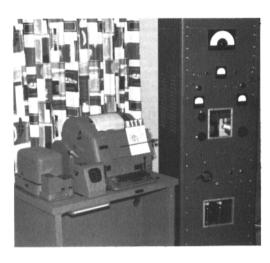
W5CSN

Here are two pictures which you may use in the "RTTY" magazine.

Both pictures are of the ham shack at W5CSN's station. The picture I have marked No. 1 is a picture of me along with a Viking II, Viking VFO, and 75A-3. Also an S-85 receiver is shown at the extreme right.

In picture No. 2, is the picture of the opposite side of the room from picture No. 1. This picture is of the model 19 and rack panels. The rack consist of a kw power supply in the bottom, a kw linear using a 4-1000 (which is still under-construction). A W2PAT converter for RTTY is mounted on top of the linear.

Sincerely, Bob Bradshaw, W5CSN







CWO C. P. ODLE, USN NSS CHIEF TECHNICIAN FOR ARMED FORCES DAY ACTIVITIES FRANK C. WHITE, W3PYW, FLOYD ZIEHL, W2RUI, RICHARD ZIEHL, K2ECQ

15

MARTS ANNUAL PICNIC

For those of you that missed the annual picnic held at Lake JACOMO on July 9, 1961, the only words I have for you is-I am sorry. We really had one swell time and the food of course was again excellent. Mrs. Edmund Runner had the Bar-B-Qued beef and ham done to a "T" and it was a treat. The XYL here (Betty) did a fine job on the potato salad and the rest of the menu was also in good taste. Ruth and Bob-WØIOC did a good job of selecting the prizes and even though Bob was on drill duty, he still had time to come by and have a bite to eat and a very welcomed drinkof pop that is.

Dave Connell-KØDHV walked off with the main prize, the transistor radio and the only reason-Jack Cook-KØAOO from Freeman, Mo. didn't win it again was because he was too busy with other things to register for the drawing. Tough luck Jack, but we still have next year to look forward too -HI HI.

Mrs. Wilbur Goll-XYL of WØDEL got the "ladies" prize which was a portable mixer. Seems as how she had wanted one for some time, but Wilbur always had radio gear on his mind when the subject was mentioned.

There was over 60 people there for the event and we hope that it will be even larger next year. We would appreciate any comments that any of you might make as to the date you would prefer to have it next year. We had it in October last year and some of the fellows thought that was too late. We tried it in July this year and it seemed to work out all ok, but we understand that there was several other picnics throughout the various States and some of the fellows couldn't get to all of them. If the July date fits everyone, we will again set it up for the first Sunday following the 4th of July.

The farthest City represented was Wichita, Kansas of which we had two different families. They drew for the "distance" prize which was a 24 hour clock. Both of them wanted it, so living so close together, maybe they can go on a "sharing plan."

So all you guys get the ole '62 year book down and circle the second or third week in July and mark it M.A.R.T.S., picnic and plan to attend-okay?

We did appreciate the card from Merrill Swan-W6AEE in Arcadia, California saving that he could not be here. I think it would be wonderful if we at some time try and have him attend one of them-or at least get him here for a meeting-how about it Merrill?

RTTY INTEREST GROWING

If the amount of mail which we are receiving each week is any indications, interest in RTTY among amateurs is growing.

We receive many requests for schematics. inquiries about equipment, the nearest RTTY operator, etc., each week. Our mailing has grown steadily in this department.

These are good signs, that more and more amateurs are giving RTTY a whirl and once they do, they seldom leave it.

Florida RTTY Society, Inc.

July 31, 1961

RTTY Meeting Aug. 10, 1961

The next RTTY Meeting in Portland, Oregon will be held on Aug. 10 at the home of W7RCL. Mell lives in a location that is hard to give instruction on how to get there. If you have not been there before please call him up either Aug. 9 or 10 in the evening and he will give you all the instructions. He lives a few miles west of the St. Johns part of Portland. The No. to call is MA 1-3557.

After you get off St. Hellens road there are some big yellow signs to get to his house.

Mell has a RTTY station on the air and for Chuck Collins in Camas that wanted to see a working RTTY station here is a chance-

The SCRTS Meeting last Saturday night had a total registered list of 54 which included 11 XL XYLS. From all reports all had a bang up time at the barbeque and raffle.

I am sorry that I will not be able to attend the summer SCRTS meeting on July 29. I will not be back from Alaska, Please inform me when the next will be held.

> 73, John Ulrich K6TVO/KL7 University of Alaska College, Alaska

We have been incorporated as a nonprofit corporation in Michigan for two years now. Our waiting list within Michigan is so large, as of now, that we are still restricting sales to Michigan amateurs. We have, however, been considering providing, at no cost, a couple of machines to foreign locations if we can come up with some fellow who would really benefit from same.

We do have an active Board of Directors, but have had no official meetings, mainly because my time is limited and as I previously mentioned, we are not looking for publicity.

Michigan RTTY Society W8DLT

It becomes my very sad duty to inform you and the RTTY gang that Clay Cool, W2EBZ, passed away at his residence in Carlstadt, N. J., on Sunday, June 18th. Clay was only 38 years old and the cause of death was cancer.

He was the editor of the "A R T S" bulletin which was widely distributed throughout the east coast. But because of his illness of the last year, he was unable to publish any further bulletins past issue No. 54.

He did manage to make the New York RTTY dinner during the last IRE Showthat being his last time out of bed. He was aware of the fact that he had that dreaded disease and was completely resigned to his fate.

Shortly before his death, he asked me to dispose of his RTTY gear and to announce to all the "Green Keyers" that the "A R T S" bulletin would die with him.

Now that he is gone, I will send to you the OTH roster of the bulletin, as per his wishes.

73, Carl V. Daniels W2ODA

This month we can report that affiliation to the R.S.G.B., was granted to the Group in April last. A copy of the B.A.R.T.G. Constitution is enclosed with this News Sheet. The formulation of our Constitution and affiliation to the R.S.G.B., is a good step forward in the progress of the Group. Membership continues to rise and totals 106 at the time of writing. Unfortunately, activity on the air does not seem to be increasing as rapidly as membership of the group. Apart from G3IIR, Eric Yeomanson, who is now

active on 2 metres and has made the longest RTTY 2 metre contact so far reported in this country by working G3ION in Southampton, we have not heard of any new stations on the air since we last reported in our previous News Sheet. The usual regulars are still active and we are pleased to be able to congratulate Bill, G3COE, on having worked WAC RTTY. This is, of course, the first WAC RTTY to be made in both this country and in Europe. Bill certainly deserves this honour after the efforts he has put into encouraging interest in RTTY DX.

BARTG

