16   February 1973

CARTG Results--
Continued from Page 2

RTTY JOURNAL

SWL Printer

For complete summary and statistics send 2 IRC to CARTG
85 Fifeshire Rd. Willowdale, Ontario, Canada. M2L-2G9
*****

FIRST CLASS MAIL

'Norm'
W1GKJ

'Emile'
9G1WW

CONTENTS

RESULTS -
CARTG "Maple Leaf Sweepstakes." 1972

With propagation generally good the CARTG contest once again was exceptional. There were more stations, more countries, more logs and higher scores than ever before. Without a doubt this is the oustanding DX contest. Lack of time and space keeps us from a detailed report but we are happy to publish the results in full. Our thanks to Gwen and her CARTG group that does such a good job.

Canadian Amateur Radio Teletype Group "Maple Leaf Sweepstates" Awards
Oct. 14 - 16th, 1972

1. ZS3B, S.W. Africa, 4,454,284 Plaque, "C.A.R.T.G."
2. LU2ESB, Argentina, 2,682,618 Plaque, "RTTY JOURNAL"
3. YV5AS, Venezuela, 2,300,580 Plaque, "C.A.R.T.G."
4. KZ5LF, Canal Zone, 1,871,580 Plaque, "RTTY JOURNAL"
5. KZ5BH, Canal Zone, 1,805,720 Plaque, "C.A.R.T.G."
6. KH6AG, Hawaii, 1,718,956 Plaque, "C.A.R.T.G."
7. I5MPK, Italy, 1,717,460 Plaque, "RTTY JOURNAL"
8. I1BAY, Italy, 1,600,248 Plaque "C.A.R.T.G."
9. SM4CMG, Sweden, 1,599,628 Plaque, "RTTY JOURNAL"
10. WA2YVK, U.S.A., 1,544,904 Plaque, "C.A.R.T.G."
11. WA2YVK, U.S.A., 1,554,904, Gold Medallion & Ribbon, "RTTY JOURNAL" High Score, U.S.A.
12. VE7UBC, Canada, 861,420, Gold Medallion & Ribbon, Canadian Director's ARRL Award, High Score - Canada.
13. I5CLC, Italy, 1,306,912, Plaque - "RTTY JOURNAL" - Low Power under 100 w.
14. VP9GE, Bermuda, 940,540, Plaque, Sidney Burnett Memorial, "Green RTTYer" - never been in RTTY Contest before.
15. Peter Boer, Holland, 901,138 Plaque, "C.A.R.T.G." SWL Printer.
16. ZS3B, S.W. Africa, 152,576 Plaque, "C.A.R.T.G.", High Score 10 Meters
17. HA5KBF, Hungary, 170,192 Plaque - "RTTY JOURNAL", Multi-Operated Station.
18. Certificates to be issued to the top scores in each U.S.A. and Canadian District, and each Country**********

Single Operator

	No. Station	Score
*	1. ZS3B	4,454,284
*	2. LU2ESB	2,682,618
*	3. YV5AS	2,300,580
*	4. KZ5LF	1,871,580
	5. KZ5BH	1,805,720
*	6. KH6AG	1,718,956
*	7. I5MPK	1,717,460
	8. I1BAY	1,600,248
*	9. SM4CMG	1,599,628
*	10. WA2YVK	1,554,904
*	11. JA1BK	1,509,100
*	12. K4AGC	1,404,232
	13. I6CGE	1,369,906
*	14. ON4BX	1,365,028
	15. W4YG	1,342,490
*	16. G3OZF	1,335,896
	17. I5CLC	1,306,912
*	18. K2PAR	1,113,952
	19. K5ARH	955,688
*	20. VP9GE	940,540
*	21. KL7GRF	930,876
	22. W2LFL	928,792
*	23. VE7UBC	861,420
	24. W4ODR	858,448
	25. VP7NH	839,600
*	26. K6WZ	831,532
*	27. CE3EX	724,800
*	28. W3KV	679,246
*	29. DK7AQ	671,238
*	30. ZS6BBK	661,830
	31. I1EVK	648,920
*	32. VK2EG	612,154
*	33. IS1AOV	586,080
*	34. XE1YJ	585,584
*	35. FO8BO	580,400
	36. W5EUN	524,252
	37. DL1VR	507,682
	38. W6CEO	498,328
*	39. W1KJL	470,680
	40. VK3DM	447,936
*	41. K7BVT	432,178
	42. K4VDM	430,424
	43. WA6WGL	416,830
*	44. PY2CYK	405,060
	45. K7MNZ/7	345,612
	46. DJ5PN	338,950
	47. W6JOX	332,912
	48. W5CEG	313,390
	49. DJ9MJ	308,800
*	50. YA1OS	281,574
	51. ON4CZ	273,765
	52. W7IU	279,104
	53. ON5WG	258,594
	54. SM6AEN	257,838
*	55. W0MT	254,748
*	56. ZL2ALW	254,360
	57. W5TZB	240,282

RTTY's NEW LOOK and SOUND

"ED" TREGO, W9WKC
517 Market St.
HOOPESTON, IL. 60942

When first viewing Hal Communication's electronic TV readout and electronic keyboard at the 1971 Dayton Hamvention, the decision was made that things were going to change at W9WKC. Accordingly, an order was placed with HAL Communications (then HAL Devices) shortly after the Hamvention and a little over a year later the RVD-1002 (character generator), the RKB-1 (keyboard) and the Panasonic VTR Monitor (9 inch TV set) were installed in the shack. From long experience as a dedicated gadgeteer, I find that a year is about normal time to go from an engineering sample to production.

I do like the HAL equipment fine, but it does require an operator re-adjustment or operator re-orientation from the former use of mechanical teleprinter equipment.

The memory retention of the RVD is twenty lines of fifty characters per line. The Characters are permanently displayed until new characters are written or until the power is turned off. A Cursor indicates where the next character will be written. When the line being written is full, the display shifts up one line and the cursor returns to the left end of the bottom line, and new characters will appear on that line. If there are twenty lines being displayed, the top line disappears as the twenty first line appears.

Practically all mechanical machines use a line in the neighborhood of 72 characters. This means that on the received display there is one line of 50 characters and one of 22. It is no problem in receiving since the RVD inserts a CR and LF very precisely at the end of the 50 character TV line. There is no "lousing up" the last letter in the line such as we get from auto CR and LF on a model 19 or 28 printer. On receiving, the only disadvantage I see, is that the memory display is not fully utilized by having one line of 50 and one of 22 characters; that leaves 28 characters of blank space on every other line. Otherwise, the TV screen is fully compatible with the page printer.

The nine inch screen seems quite adequate for normal viewing. I put a piece of tape at the bottom of the TV monitor at the end of 22 characters which helps me to know when to send CR and LF for the other fellow's page printer. When I contact someone who has auto CR and LF I usually ask him to just type continuously to make maximum use of my memory display.

I am informed by Hal that to make the RVD generate a full line of 72 characters would up the price considerably and greatly reduce the market amongst the ham fraternity.

The only installation problem encountered was the derivation of the required interface voltage for the RVD-1002 of minus 5 to 15 volts mark and plus 5 to 15 volts space from the 180 volt loop of my Electrocom FSC-250. Sounds simple, but actually did need a lot of experimentation. During the course of which, I burned out an input resistor on the RVD. HAL solved the problem for me by building a loop interface network into the RVD. The loop interface is now a standard option on the RVD allowing a connection to be made to the normal teletype loop.

The RVD ignores any incoming CR's but supplies one when it receives a LF. A number of RTTYers have their machines adapted in this way when installing auto-CR, LF, non-over print, etc. I had my own Model 28 rigged to ignore the first incoming CR but not the second.

The RVD-1002 has four speeds available at the press of a button, 60, 66, 75 and 100 WPM; plus "Unshift on Space", a "Letters" button and a "Line Feed" button. The "Letters" and "Line Feed" controls are momentary buttons but the "Unshift on Space" can be left permanently engaged.

I use the HAL VTR Monitor for the display since I did not have a spare TV

set to modify for reception from the RVD-1002. Modification of a TV set is quite simple and full instructions for so doing are given in the RVD manual. The HAL Monitor can also be used as a normal TV set at the flip of a switch. This is a feature I find quite handy, especially when the neophyte RTTYer with his brand new tape gear announces that **he** is going to send me a **picture**; without checking to see if I even want the picture, or could I receive it if I did. I know I am then good for at least a half hour of something more entertaining on the commercial TV channels.

This is going to be a very bleak Christmas without being able to play my "Jingle Bells" tape since there are no bells in the TV Monitor. The RVD does, however, print a cute little picture of a bell whenever the "bell" signal is received.

The RKB-1 Electronic Keyboard requires considerable operator re-orientation from the normal familiarity with a mechanical keyboard. At least it does for me; I have about 12 years experience with a Model 28. The RKB-1 is a standard four row typewriter keyboard which closely resembles the IBM Selectric. The most noticeable difference when first using the RKB-1 is its absolute silence. Many people have trouble typing on a silent keyboard as I do; I am not sure whether I really hit a key or not. That problem I solved fairly easily by just turning up the loudspeaker enough to monitor my typing, so that I don't hit the next key until I hear the last one.

The RKB-1 is most unforgiving to the "burst" typist and I am afraid I have to place myself in that category. A "burst" typist is one who hits certain combinations of letters much faster than others. The mechanical keyboard will restrain you from typing any faster than the fixed 60 WPM. The RKB-1 has no built in restraints; whenever the 60 WPM is exceeded, it just doesn't print those letters at the faster rate. For instance, if I send the word "good" my finger is already on the letter "o" for the second transmission of it and therefore I hit the second "o" more rapidly than I would either the "g" or the "d" and hence the word comes out "god". That is, the second "o" just isn't transmitted.

Since we have four rows of keys with the numerals on the top row, there is no operator induced "upper" and "lower" case. The keyboard supplies the upper case signal just prior to transmitting a numerals key signal and similarly supplies the "lower case" signal just prior

to sending a "letters" key signal after having been in upper case. With successive keys after being in either upper or lower case, the extra signal is ignored. I also find this additional signal somewhat upsetting to my cadence because of having to wait for the extra signal. But, here again, it is just something we have to get used to. I can well remember when starting out in RTTY that it was quite a problem to get used to punching three keys to just get one numeral in a call sign. So, in this case, we substitute time for the actual depressing of the key.

One other point about the keyboard; it lacks a "break" key which I always found quite nice to have to check the space signal or to tap out the CW Ident. There are several extra keys on the board and it shouldn't pose any serious problem to any enterprising ham to put one in. It just breaks the loop circuit.

When transmitting at 100 WPM I find that most of my problems with the keyboard disappear. Then the small fractions of time necessary for the upper and lower case signals become minute and the problems of "burst" typing are gone, since in no way can I approach 100 WPM in typing. There are a few of the lads on now with 100 WPM capability and when I find one, using the RKB-1 is just pure pleasure and I have not known the mechanical keyboard to equal it. I am sure that most will agree that typing is much faster on a keyboard perforator with its 120 WPM capability than it is on a machine limited to 60 WPM. One gets just about the same "feel" to the RKB-1 at 100 WPM as with a keyboard perforator. That is, the only limit to your typing is your own ability and the machine is not holding you back.

As to the problems or equipment failures I have had in the four months of operation, I would say they have been remarkably few for gear of a wholly new design. My biggest problem was in getting the interface voltages from the TU. The only actual equipment failure was an intermittent loss of memory display which was tracked down to dirty contacts on one of the plug in circuit boards of the RVD-1002. With that exception, I would have to say the electronic gear is just as reliable as any mechanical gear which I have used and it certainly won't require the maintenance of a mechanical machine . . . And it is a pleasure not to have to worry about supplies of paper and ribbons.

The RKB-1 puts out an annoying signal at 3620Kh and slowly drifts up to

3633Kh, which is right in the RTTY part of the band. An easy solution to this problem was to use shielded wire for the loop.

One other question I am frequently

asked is: "Is it compatible with mechanical equipment in the same loop?" Yes, of course it is. Any mechanical gear such as another printer or TD can go right in the loop with it.
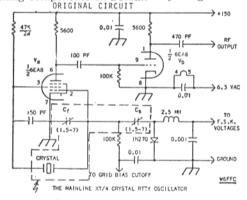
*****

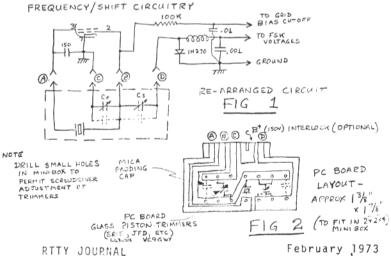# XT-4 Modified for Multi Channel Use.

WERNER FEHLAUER, KL7HKB
392 Kenair Ave.
APO SEATTLE, 98749

Having built an XT-4 per Irv Hoffs article in the RTTY Journal and being well pleased with its performance, I was nevertheless faced with the problem of coming up with some additional frequencies. The idea of duplicating the XT-4s did not seem practical. With a little rearranging of components it was possible to place all the frequency and shift determining components on a small

PC board. The XT-4 was modified by adding a small 6 pin PC board edge connector on standoffs, as close as possible to pins 2 and 3 of the tube socket.

A schematic of the modified XT-4 and an example of the PC board is shown in figure 1 and 2. With this modification I am now able to change frequencies by just exchanging the small PC board. Frequency and shift stability have proven to be excellent, with little or no noticeable drift. The additional PC boards should be kept at a reasonable close temperature as the entire XT-4 package.

ORIGINAL CIRCUIT

THE MAINLINE XT/4 CRYSTAL RTTY OSCILLATOR
W6FFC

FREQUENCY/SHIFT CIRCUITRY

RE-ARRANGED CIRCUIT
FIG 1

NOTE
DRILL SMALL HOLES IN MINIBOX TO PERMIT SCREWDRIVER ADJUSTMENT OF TRIMMERS

PC BOARD GLASS PISTON TRIMMERS (ERIE, JFD, ETC)

B+ (150V) INTERLOCK (OPTIONAL)
MICA PADDING CAP

PC BOARD LAYOUT — APPROX 1 3/8" x 1 7/8"

FIG 2 (TO FIT IN 2"x2"x4" MINIBOX)

S.O.R.C.A.R.S. self operating RTTY contest amateur station.-

Part 3 of 3 Parts

JOE KASSER,G3ZCZ/W3
4701 East-West Hwy, Apt.205
SILVER SPRINGS, MD. 20910

OPERATION WITH RESPECT TO CONTROL MODULE

Assume that all modules are operational ready for a typical contest. As C Hour (Contest Start Hour) approaches, the operator goes into the shack and briefly scans the bands to check on conditions. He sets the Bandswitching Module to switch the transceiver to the appropriate band for the various times of day that the contest operation will cover.

The contest begins at C Hour. Suddenly the bands are full of rtty signals. The operator pushes the "start" button and relaxes. (Of course the start signal could have been supplied by a time-switch, but we don't want to replace the operator entirely). When the "start" button is depressed, a pulse is transmitted to the **tuning module** causing the vfo to begin tuning the band while the elapsed time counter begins to count.

A rtty signal is detected by the **terminal unit**! The tuning is stopped and a pulse sent to the **call recognition module** causing it to begin to look for a CQ call. No CQ is copied in a ten second period. The **data module** sends a "data invert" pulse to the **tu** in case the signal is being transmitted using inverted tones (this pulse is also sent to the **afsk module** so as to keep the transmitted signals in phase with the received ones). No CQ is copied during the next ten minute period. A pulse is then sent to the **tuning module** to continue tuning the band. After investigating three such signals a CQ is found. The CQ is copied by the **call recognition module** and a pulse is sent to activate the **memory module**. The call sign of the station sending the cq is compared with the calls stored in the memory (as this is the first, the memory is clear). Since the memory identifies the station as one that has not been worked, an "attempt qso" pulse is sent back to the **control module**. When the sending station signs the **control module** sends pulses to the **afsk module**, the **transceiver**, the **memory module** and the **standard information generator module**, and a call is sent. Typically it would be "FOWM FOWN FOWN DE G3ZCZ/W8

G3ZCZ/W8 G3ZCZ/W8 K". A pulse is sent to the **CW ID module** and a cw id generated. SORCARS then reverts to a listening mode. A pulse is sent to the **call recognition** module instructing it to look for its own call coming back at it (G3ZCZ/W8). Nothing is heard for ten seconds so the **control module** repeats the sequence.

An answer is received; typically "G3ZCZ/W8 G3ZCZ/W8 G3ZCZ/W8 DE FOWN FOWN 59002 PARIS G3ZCZ/W8 DE FOWN K" The recognition of G3ZCZ/W8 resets the **memory module** to look for a "DE space" sequence, compare the incoming call with the one stored in the memory; namely the one that SORCARS is attempting to establish contact with. If they are the same the incoming signals are printed out on the **printer**. The **qso counter module**, the **report giver module** and the **standard information generator module** are pulsed in turn by the **control module** to generate the following message; the **transceiver** being held on for the duration of the message, "FOWN FOWN FOWN DE G3ZCZ/W8 G3ZCZ/W8, QSL, UR 590001, JOE, DETROIT, MICH, 73. FOWN DE G3ZCZ/W8 SK." The message is repeated once and the **qso counter module** is then pulsed once to advance its count to 002 .... and so on. The **control module** routes control pulses and data between the other modules according to the flow chart of Figure 2 using standard digital techniques. The **bandswitching module** sends the **control module** a pulse when it determines that it is time for a band-change. The **controle module** stores that pulse and only implements a bandchange when no qso is in operation, preferably after a short listening period to determine that no other station is calling in.

Each time an on the air transmission is made, the **control module** ensures that the time and frequency data generated by the **clock** and **frequency counter module** are printed out on the **page printer** (but are not transmitted).

SUMMARY

SORCARS can now be seen to be a mixture of simple and complex modules, some of which are already in use in the average RTTY station, connected together so as to give an automatic opera-
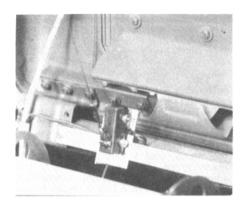

Paper-Out Switch for the Model 28KSR Printer

ROBERT CLARK,K9HVW/WA4VYL
823 Jones Ave.
MARYVILLE, TN.37801

After printing for an hour or more on the platen, one begins to think about the possibility of a switch to disable the printer when it runs out of paper. When it happens the fourth time, ideas become action! I monitor the 14075 khz auto-start frequency on a twenty four hour-a-day basis. One of the nice things about autostart is that it requires only occasional attention. On many an occasion, I have completely ignored the printer for a period of days when other matters were more pressing than ham radio.

The Teletype Corp. has a nice little modification kit for the job at something in excess of $12. Examining the kit, it seemed a bit high-priced considering what was supplied with it. It was therefore concluded that a homebrew switch would have to be the answer. The switch described here is quite a bit simpler than the Teletype version and I believe has two advantages over the more expensive version (three, if you include price).

The switch is not mounted on the printer proper, but on the cabinet of the KSR. A piece of Reynolds "Do It Yourself" aluminum bar (3/4" x 1/8") twelve and a-half inches long was drilled to accept the screws from the lower inside corner of the two cover hinges (figures one and three). A piece of Reynolds aluminum angle (1" x 1" x 1/16") two and a-half inches long was "Pop"riveted to the bar three and a-half inches from the left end. A SPDT micro-switch was attached to the angle with number six
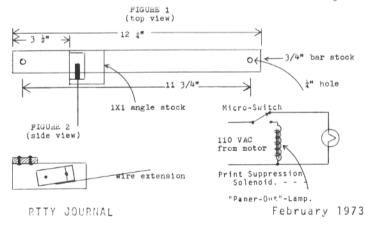
hardware (figures two and three). One of the two holes in the angle was enlarged into a slot with a small file so that the position of the switch could be adjusted. The leaf on the micro-switch was not long enough to rest on the paper, so a stiff wire was passed through a hole in the end of the leaf and soldered in place. The source of the wire was an old magazine binder, but a suitable replacement should not be difficult to find. The leaf and wire extension extend six inches from the swivel point on the switch.

The switch may be used to disable the printer in several ways. The method chosen here was to place the switch in series with the print suppression solenoid. A lamp was also used to indicate that the machine was in non-print due to a low paper supply (figure

FIGURE 1 (top view)

FIGURE 2 (side view)

VHF RTTY NEWS

RON GUENTZLER, W8BBB Editor
Route 1, Box 30
Ada,   Ohio 45810

This month we have several miscellaneous items donated by readers.

From Smitty, K4RJ, Route 7 - Box 315, Franklin, NC: "My connection with RTTY started while up in the Washington area, when I "inherited" a Model 15 from a friend who moved. Curiosity was too much, and I had to find out what made it go. This required the help of several more knowledgeable hams, hence an introduction to RTTY J. When I found back issues were hard to come by, I subscribed.

"In due course I got it on the air, and made a few contacts both DX and stateside, also a few on MARS freqs. Also I made 1 QSO running straight FSK on 144 MHz.

"Shortly later I really got going on 2304 MHz, heard my own echoes, and then worked W4HHK, all on CW of course. By this time I had the idea it would be fun to print my own RTTY echoes from the moon. But at that time I had already contracted to sell my house in MD and buy this one in NC. So there wasn't much I could do about it.

"Moving was a real problem (28' dish and a few other little things!). I discarded a home-brew TU, but kept a mil surplus one which I thought was better. Here in NC I got the moon-bounce gear running on CW first. Then when I tried out the surplus TU I found it was great for 850 shift, but not much good for anything else. For RTTY via the moon I think I need 170 shift or less. So the MARS got it back, leaving me with no TU at all.

"So far as I know, no ham RTTY sigs have ever been copied by moon reflection. And so it was a bit of a disappointment when my ad in a recent RTTY Journal produced no results . . .

"I expect to continue experimenting along this line. What I need right now is a good parametric amplifier diode to raise the S/N of my echoes a bit. After that I may start figuring how to build the cheapest TU which is good for copying through random noise. (On UHF we have no QRM, no QRN, no line noise, no ignition noise, at least not when pointing at the moon.)

"New UHF CW record. 2304 MHz CW via moon reflection. 22 NOV 72. 0619 - 0646 GMT. W6YFK CA to K4RJ NC. Terrestrial distance 2080 miles equals 3347 km. This breaks the record of 750 miles set in OCT 70 by W4HHK and W3GKP."

Thanks much, Smitty. If anyone can help him with ideas, equipment, or sitting at the other end, please let him know.

Eskil Hedetun, SM7DMG/7, Delphi S-317, S-22244 Lund, Sweden, sent letters containing some information and many questions. "Have this summer been introduced to a new RTTY system. It is called the ARQ-system. Unfortunately, I am not able to give any details but: It uses the normal teleprinter code CCITT no. 2 at 50 Bd. It converts and adds parity information to this. It sends the "new" code at 75 Bd. It receives and reconverts to 50 Bd CCITT no. 2 **and** checks for parity. If parity is OK it prints; if not OK, it requests for retransmission of the single character. This means that you have to use two different radio channels, one for the actual information, one for retransmission request. I have had the privilege of seeing this system in operation. I am quite amazed.

"For amateur radio it could be very interesting to make a converter that takes care of the parity signal; i.e., gives a blank instead of one garbled character.

"Been to a newspaper recently, and saw their teleprinters for "press releases." It was the German Siemens T-100 RO with triple types on the type bars. That is, it could print both small and CAPITAL letters, and all the normal figures as well. Guess this is the same idea as mentioned in an early issue of the Journal, describing a Russian teleprinter. This was a wire only service. Do you know if this triple letter alphabet is transmitted on the air? By the way, it was 8-level tape out of the printer.

"As long as there will be a commercial interest in 8-level machines to be used as remote stations for computer systems, I guess the hams can't get the machines at a reasonable price."

We have one piece of information that is related to Eskil's letter and computers: The Amateur Computer Society publishes a news letter. For a free sample copy write to: Amateur Computer Society, Steven B. Gray, 260 Norton Ave., Darien, CT 06820.

Mel Dunbrack, W1BHD, 30 Greenleaf Street, Malden, MA 02148 sent the following information:

At my request, the local frequency committee of the North East Repeater Association, on 1972 NOV 17, has assigned a FM simplex channel frequency of 146.580 MHz (which is sandwiched between repeater input and outputs) for the primary use of RTTY, Slow scan TV and Facsimile modes of operation. W1BHD has these three modes and activity should be on the increase as many fellows are interested. RTTY will use standard tones 2125/2975 and the FM deviation will be between 5 and 7 kHz which is roughly standard for this part of the country. When organized, station schedules will be forwarded. . ." Thanks, Mel.

Since we have been in the RTTY business, 146.700 MHz has been the national FM RTTY frequency. There are a few areas where activity was on some other frequency because of prior use, but in most locations it was 146.700 MHz. In the mad rush to get voice FM repeaters on the air, 146.700 has fallen as a RTTY frequency. For example, in this area there are now two voice repeaters with outputs on 146.700 MHz. Especially with one, when it is on, it precludes the use of the frequency for RTTY operation. Because the frequency is **not** effectively **monitored** by the voice users, it is common to have the repeater come on regardless of whether the frequency is already in use. As Mel indicated, the repeaters are forcing simplex operation into the space between the repeater inputs and outputs. If you have ever tried to operate simplex on a channel that has a repeater on it, you know how difficult the operation can be. Generally, the simplex operator is forced to move elsewhere.

That's it for this month. Next month, we plan to repeat the beginner's series that was run here about 4 years ago. 73 ES CUL RG.

***

S.O.R.C.A.R.S.-

tional facility for the contest type of qso only.

This has not been a constructional article. This has been an idea article, discussing the techniques involved in the SORCARS. For any amateur with a knowledge of both digital and teletype techniques, the construction of SORCARS would be a worthwhile undertaking.

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14. Digital Counter With Teletype Printout. R.G. Simmons W2RBN - QST - August 1968.
15. Automatic Amplifier Tuning. F. Walsmith - W8PHR - QST - September 1970.

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Dayton Hamvention

RTTY JOURNAL HOSPITALITY SUITE-
IMPERIAL NORTH MOTEL
APRIL 27- 28, 1973

RTTY·DX

JOHN POSSEHL - W3KV
Box 73   Blue Bell, Pa., 19422

Hello there . . .

The last flurry of DX activity for RTTY in the old year was of course the Volta Contest which took place in early December. While there was no advance notice of any exotic DX prefix that planned operation during the contest period, there were a few surprises in store for those that participated. About midway through the contest period there was a big signal coming out of Africa and it was spelling out 9G1WW. Emile had just received the proper gearing for his machine and as all the other equipment had been ready for weeks it was just a matter of changing gears and he was "off to the races". The very first contact was with Paco, XE1WU, on Fifteen Meters and after that it was Pandemonium. Emile handled the situation in grand style and many of the boys made contact with the very first station to operate RTTY from Ghana. To make things even more interesting, Cara, 9G1YA, played a few tunes on the keyboard to add to the ever increasing list of countries represented on RTTY by a YL operator. It is unfortunate however that the operation from Ghana will be of short duration. Emile and Cara are returning to the States in February and although they are trying to get other hams interested in the mode there does not seem to be a replacement available at this writing. Meanwhile, Emile and Cara are trying to make as many contacts as possible before the QRT and they may very well succeed in contacting all or most of RTTY DX gang by that time. Operating time had usually been from about 2000z until the band folds on 14 mhz and most any time on week ends. Emile indicates that they will be located in the Oakland, California area on their return and will have a continued interest in RTTY. Their QSL manager is -

Clifton J. Arnold, W5EGH
4868 Sierra Madre Drive
New Orleans, La. 70127

The contest was the last activity for Jean from FM7AJ as he went QRT and left for France in mid December. We of

course all thank Jean for putting this rare country on RTTY and many of us had the pleasure to meet him personally on his recent trip to the States. He acquired some TU equipment when he visited HAL and has a machine stored in France so as soon as he gets settled look for F6BEX on RTTY. We should be printing FM7AA very soon now as he is planning to keep Martinique active on RTTY.

In the contest, activity was fairly good from all Continents with the possible exception of Asia. We never did print an Asian station here although a few of the West Coast USA boys managed a fast contact with Ian, VS6GA, during a short opening. WA6AXE/KG6 was in there for a surprise multiplier from Oceania. Joe had just finished work and decided to try a CQ before hitting the sack, not realizing what he was getting into. We imagine that his sleep was delayed for several hours. Sigge, OH0NI, was very active on several bands from rare Aland Island giving a new country to many that had not worked him before.

There seemed to be a bit of confusion as to whether or not a message number was to be included in the message exchange of "RST-ZONE". Some insisted on having one and some didn't and the net result was a lot of QRM and lost time particularly during the early stages of the Contest. Next year we believe that the rules will be clearer on the message exchange.

The boys were no sooner recovering from the excitement of the Volta Contest when up pops VP2KH on the evening of December 8th with an excellent narrow shift signal from the Island of St. Kitts and the very first RTTY to come from any of the many VP2 prefixes of the Caribbean area. If this were not amazing enough in itself, the owner and operator of VP2KH turns out to be Sid May, that famous second op with Ed at 9J2ED last year. After the Zambia operation went QRT, and after a sojourn in England, Sid and his family are now located on St. Kitts and will be there for quite some time. Sid is very active and most of his

old friends have already been in QSO in addition to scores of new ones. QSL direct with IRC's to -

Sid May, VP2KH
P.O. Box 184
Basseterre, St. Kitts West Indies

We all wish Sid the Best of Luck in his new assignment and his presence may generate activity from many of the other Leeward and Windward Islands in the area. We do hope so.

Well, that just about closes out RTTY activity for the past year and as we sit here trying to write this column the New Year is only a day or so into 1973. I guess we would all like to know what lies ahead, particularly as to things RTTY-DX. We hope that what follows will pave the way for things to come.

A letter from Jan, ZS6BBK, has us all excited as things look great for the early part of the year. For some time he had been gradually planning a DX-pedition to some of those rare prefixes near and around South Africa. During March/April Jan plans to put the following countries on RTTY. A2C, Botswana; 7P8, Lesotho; 3D6, Swaziland; and also ZE, Rhodesia, if there has been no activity from there at the time the trip starts. Operation will be on 15 and 20 Meters only and a Mite machine with a ST-6 and a linear for the TX will be used. Modus Operandi will be as follows. Transmit frequency will 085 khz on each band and listening will be from 5 to 15 khz up the band. This is an excellent plan and should ease up the intolerable chaos that results when several RTTY stations all blast off on the same frequency, narrow shift not-with-standing. Plans are still being finalized at this writing and we will attempt to have more definite information before the trip starts. If it becomes too late for publication look for QST tapes on about 14080 khz for the latest info on the DXpedition. In closing his letter Jan says that ZS2MI, Marion Island, is now on 45 baud, RX and TX, so it should be no problem to make a contact. Look for him on weekends.

Via Lars, SM0OY, we have word that Brother Ed. at HV3SJ, is anxious to get a TU so that they can put the station on RTTY on a more permanent basis. When Carl, HB9P, and his group from Switzerland completed their operation from there for the CARTG Contest they left a machine, a LO 15, but there was no TU available at the time. If anyone happens to have an excess or surplus TU on hand I am sure that it will be put to good use at HV3SJ. Also, a few words of appreciation for past activity in a short note may help to keep the station on the

air. Apparently higher authority is not too happy to have RTTY activity continue but a verbal show of support and appreciation may tend to soften this attitude. Brother Ed. can be reached at -

HV3SJ, Curia Generalizia Gesuiti
P.O. Box 9048
00100 Roma, Italy

The last W A C Award for 1972 goes to --

Nr. 205 Edward L. Bruns W3EKT

this makes a total of 24 issued during the year.

We close now with appreciation to, W3DJZ, ON4BX, K6WZ, ZS6BBK, SM0OY, W9BT, 9G1WW.

73 de John

Paper Switch---

four).

To adjust the switch position it will be necessary to have a nearly empty roll of paper. When the cover is closed, the wire extension should "ride" the roll of paper. The flex in the wire should allow you to use even the jumbo size rolls. The switch should be held closed by the paper roll until it has just a few turns of paper left. Then the switch will open and disable the printer. With the nearly empty roll of paper loaded, run the paper out of the machine until you get to the point where you would like to have the switch disable the printer. Adjust the switch to open at this point. Then reroll the paper and repeat. It may take several adjustments before you get it just right. One of the nice things about this switch is that when you open the cover (large cover) to change paper, the switch is raised out of the way and then placed back in operating position when the cover is closed. Another feature is that the printing mechanism is disabled any time the cover is opened. I find that quite nice when I decide to add ink to the reinker reservoir or lubricate the machine.

If you don't like the surprise of running out of paper while working that rate DX, you may wish to mount a second switch the same way to turn on the warning light a few turns before the machine is disabled. Or, since there will be three or four feet of paper remaining on the roll, you may be satisfied with a manual over-ride switch.

The switch has been in operation for several months, with an average of three rolls of paper per month. The operation has been reliable at the end of each roll and has eliminated the job of cleaning ink off the platen each time I run out of paper.

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We monitored the emergency channels handling traffic during the Nicaragua earthquake.

Frankly it is hard to say if we were proud of the hams or disgusted with them. I guess some of both as they got the job done in spite of a great many eager beaver-nincompoops that insisted on breaking- tuning up on the frequency and insisting on getting their call acknowledged, probably so they could tell the neighbors that - "they were in it".

A little listening on the frequency would have answered all their questions- given other spots for certain traffic and allowed the parties running the net to accomplish a lot more. The control stations and the few stations on from Nicaragua had far more patience with these "me too" stations than we would.

It was not unusual for some station to continue breaking regardless of what was going on until he was recognized - then calmly telling the guy his name was Murgantroth - and spelling it phonetically before saying he was from Podunk, Nevada, was standing by on the frequency in case there was traffic to Podunk.

Fortunately the public heard none of this and Ham Radio again served the emergency well. The publicity in all papers certainly helped ham radio. Guess it was like Johnny Carson once said - we won the war, - not on finesse but by pure power.

A good RTTY station in Nicaragua could have handled more traffic in an hour then the QRMed phone bands. Too bad YN1CW was not active on RTTY. There may have been some commercial RTTY operation but we don't know of it.

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We have seldom delivered any sermons from the JOURNAL but maybe the emergency QRM situation has us worked up.

Not BY LAW but by custom RTTY stations have worked in certain small segments of each band. Any CW station in this segment seems to be fair game for RTTY stations to drive out even though there is room on either side for a QSO. By law this is deliberate QRM

and illegal, but what do you do when there is no room for a qso unless you go into the other portions of the band. The only answer we can see is trying to educate everybody, especially CW stations that there will be no RTTY QRM if they go down the band. We doubt if even a bureau in Washington could accomplish this so the only answer seems to be using common courtesy. There is far too much of the attitude that "if I can't work him - you ain't going to." Tempers flare and nothing is accomplished. Let's us stick to our portion of the bands and try to keep our cool.

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We noted a recent ad for a new Kenwood TS900 transceiver that included in the specifications - built in RTTY FSK - but with a fixed shift of 850 Hz.

Curious as to the selection of a fixed frequency and especially 850 Hz when a great majority of stations are using 170 Hz we wrote the supplier for information.

Their answer stated that probably in the future 170 shift would be used but the shift can be changed by adjusting two crystal trimmers. The directions supplied suggest the use of a counter for this adjustment. A great many hams do not have counters available but with another stations help we have no doubt ham ingenuity will get the job done anyway.

There was still no suggestion as to how a choice of shift frequencies could be made in a hurry. Again someone will figure out a method. When they do let us know so we can pass it along. FSK is a much safer method for RTTY. Anyone listening to the double signals from AFSK about 3 -4 KHz down from the fundamental, and many times very strong, will agree.

Michigan area RTTY net-

The Civil Defense RACES groups in Muskegon - Ottawa - Kent counties are in the process of trying to stimulate interest in local county to county VHF-FM RTTY nets up here. Frequencies to be used will be those as assigned by the state RACES officer, plus 146.7 mhz.

We hope to expand this as required - hopefully to state wide on 80 meter RTTY. Those interested who may read this in the journal, please contact WA8-GVK.

Also, we in these counties will be looking for RTTY activity on 80 meters for the SET (ARRL Simulated Emergency Test) on the weekend of January 27-28.

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BACK ISSUES -

New subscriptions and classified ads are cash in advance as we have no method for billing. New subscriptions will be started with the current issue and one back issue, if requested. Please do not ask us to start any further back than this. Back issues - if available - may be ordered at 30¢ each at time of subscription. The JOURNAL is mailed about the 20th of the month preceding the dated month. May and June are a combined issue and July-August is a combined issue.

The ONLY back issues available are listed below. 30¢ each.

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1966- Oct.-Nov.-Dec.- [3]
1967- None.
1968- March-[1]
1969- Oct.-Nov.-Dec.- [3]
1970- None.
1971- Jan.- May.-June.-July.-
       Sept.-Oct.-Nov.-Dec.-[8]
1972- Jan.- Feb.-Apr.-May.-July.
       Sept.-Oct.- Nov.-Dec.-[9]
1973- Jan.-[1].
[MAY-June] - JULY-August] are
conbined issues.....
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What You See -- Is What You Get . . .

In case you didn't see anything you wanted in the pix by Don Royer, WA6PIR, entitled "What you see - you get" that we ran last month. Look again now.

It is all our fault, the pix should require overlining and we ran it on our machine which has anti- overline protection. The good fairies that take care of such things have agreed my stupidity should not penalize everybody so you can all make another wish. "What you see-You Get".

WHAT YOU SEE ----- IS WHAT YOU GET

AK-AL-AZ- ?

Having noticed the odd looking state abbreviations in brand X and Z amateur radio magazines, I checked with the Post Office. The man said, "That is right but you don't have to use them yet"..He said that he had a notice around somewhere but couldn't find it. Lots of us dragged our feet with other changes, remember the condenser, "Nertz to Hertz", the ZIP code? As communications people, I suggest that we help this time.

WB2CZL