

# RTTY

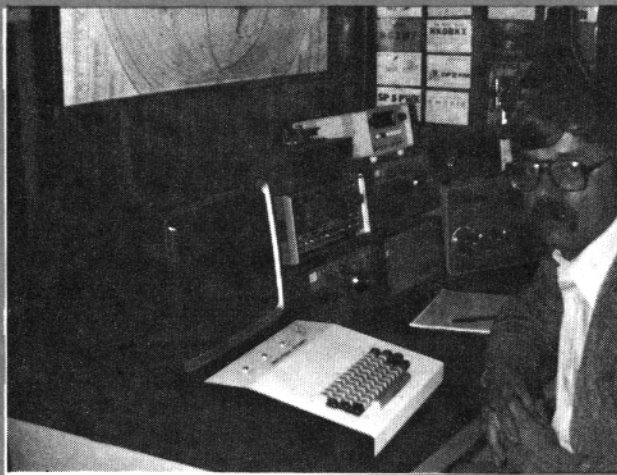
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ROBERT MEYER, WA9AKT of Libertyville, Illinois

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## RTTY JOURNAL

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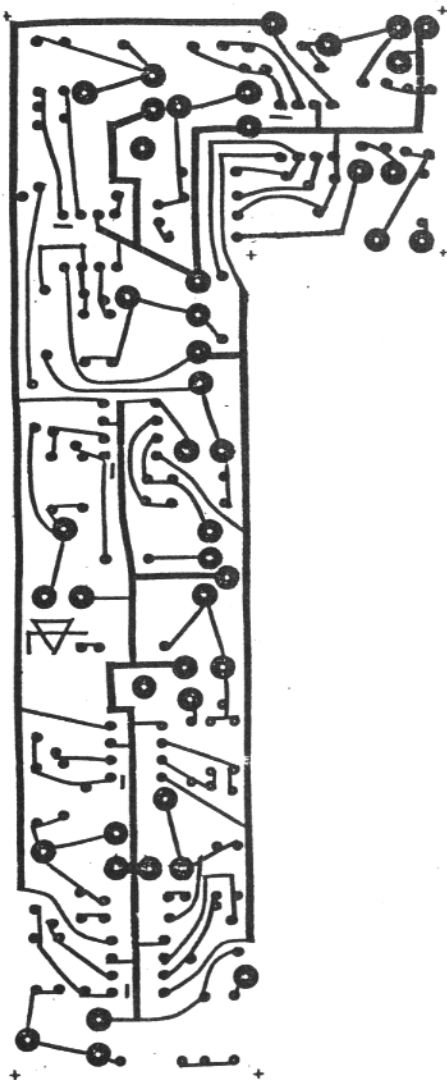
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### DT600 RTTY DEMODULATOR...ACTIVE FILTER CONVERSION by S.A. DIGBY, ZS6BLV

Difficulty in obtaining the 88mH coils beloved of the RTTY fraternity and the probability that these will not be available in future makes it necessary to consider alternative filter designs.

Until such time as a popular new demodulator design appears the ST6 and DT600 will remain the mainstay of most amateur teleprinter stations.

This article gives constructional details for an ACTIVE FILTER "piggy-back" board for the DT600 and includes an input bandpass filter and the MARK and SPACE discriminator filters.

The board is designed to bolt directly to the DT600 at two of the original inductor mounting positions. Fly leads are used to make connections to the necessary signal and power points on the mother board.

The filter responses are plotted for the center frequencies given for the bandpass filter, however the individual constructor may tailor these to his own particular requirements.

All component information with layouts and schematics are included and no difficulty should be experienced. Care should be taken with drilling and soldering as pads and tracks are in most cases fairly small.

← Full size PC layout foil side.

### TUNING PROCEDURE

Equipment: Audio Signal Generator.  
Frequency counter.  
Oscilloscope or VTVM.

For 170 Hz shift:

Connect Audio signal to input.  
Set frequency for 2420 Hz and adjust first stage trimpot for a peak output at pin 1 of IC1.

Change signal to 2000 Hz and peak second stage trimpot for max voltage at IC1 pin 7.

Adjust stage three similarly for 2320 Hz. Test at IC2 pin 1.

Adjust stage four similarly for 2100 Hz. Test at IC2 pin 7.

Note: At one side of trimpot adjustment, the filter may break into self oscillation. This will be seen as a very abrupt rise in output. Back off and look for the correct peak.

The filter chain has progressive amplification so measuring scales will have to be changed for each stage. Care should be taken with the first stage specially as the levels are very low.

continued on page 4

# A RTTY DXers' Dream



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Call for further details.



43 way edge	Function	Commercial	"Ham Radio"
12 t	Audio Input	3 t	1
7 and 8 u	Ground	2 u	2
9 u	Limiterless	4 u	3
18 t	Limiterless	9 t	4
13 u	Scope (MARK)	6 u	5
15 u	Scope (SPACE)	7 u	6
23 u	Data Output	13 u	7
21 u	Loop Keying	12 u	8
25 u	Print/Non-print (Data flag)	15 u	13
32 t	Standby	18 t	14
31 t	Autostart Normal/Fast	17 t	15
36 t	Motor Automatic/On	20 t	16
37 t	Motor control relay	21 t	18
20 t	Tuning meter + ve.	10 t	22
17 t	+ 12 volts	8 t	23
36 to 40 u	Ground	22 u	24
10 and 11 u	- 12 volts	5 u	25
34 t	Autostart Normal/Off	19 t	26

### REDUNDANT COMPONENTS

When using the active filter conversion, the following components on the original board are not required and should not be mounted:

C1, C2, C3, C4, C5, C6, C7, C8, C15A, C15B, C16, R1, R2, R3, R16, R17, R18, R19, D6, D7, L1, L2, L3, L4, L5.

As the boards are not through-hole plated, it is necessary to solder components top and bottom where the pad has a track attached. Certain pads require wire feed throughs to connect the top and bottom tracks. It is best to place all components first without soldering so as to identify the single feed-through positions. Some of these are located between or underneath closely spaced components which will have to be removed to allow the feed-through wire to be soldered in place. For the active filter conversion be sure that where redundant components have not been installed, the signal lines are completed, where necessary, with a similar feed-through. If IC sockets are desired, use either Molex terminals or Wirewrap type sockets. Space the latter about 4 mm off the board and this will allow the top-of-board soldering. Snip off the extra length afterwards.....Have fun.

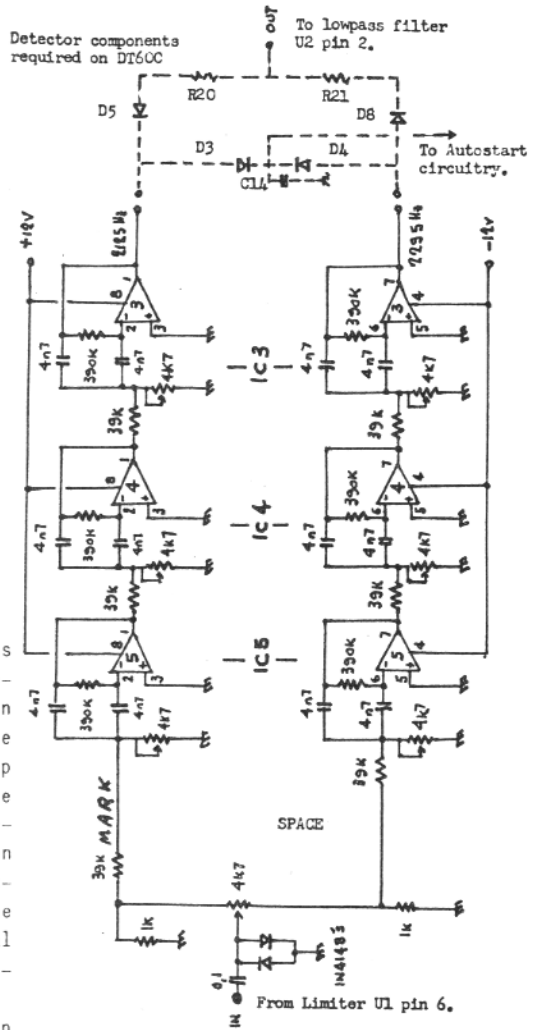
### NOTES ON EDGE CONNECTOR

The SAATI version of the DT600 is now provided with a 43 way edge connector and the signal lines have been rearranged to suit. As this may cause some confusion to anyone building up this design for the first time, the functioning terminals are listed below. A cross reference is also given to aid the constructor when consulting the original Ham Radio magazine article (Feb. 76) or the commercial write up by Data Technology Associates.

In all cases numbering is given from left to right looking on the component side with the edge connector towards you. As the boards are double sided, 't' indicates top or component side, and 'u' indicates underside. i.e.: 1 t and 1 u are immediately opposite one another.

(If you use a "VERO" 3 unit double sided edge connector socket and cut a slot in the edge of the PC board corresponding to terminal 7 on the 43 way version, the VERO socket will give the correct numbering. Top of board terminals will number A1 to A43 and bottom of board, B1 to B43. Terminal 7, as you will see, is one of the ground lines but as it is cleverly duplicated on terminal 8, all is well.)

### DISCRIMINATOR FILTERS..SCHEMATIC.



### Discriminator tuning:

Mark stage	1 peak at	IC5	pin
2	IC4	1	
3	IC3	1	
Space	1	IC5	7
	2	IC4	7
	3	IC3	7





George Hammon WA6CQW  
 14215 Pecan Park Lane SP 73  
 El Cajon, CA 92021

FROM  
 THE  
 MAILBAG

RTTY JOURNAL READER SURVEY

Reader response to our survey was very gratifying. I wish to thank all of you who took the time to fill a survey sheet out. We received many survey sheets from foreign countries, and to you a special thanks.

I will discuss, in this issue, the following areas: years licensed, class of license, years active in RTTY, member of RTTY club, RTTY repeater frequency, Amateur Radio magazines subscribed to, HF transmitter, HF receiver, HF linear, tower, mast and HF terminal unit. The following issue will contain the remainder of the survey.

YEARS LICENSED

1 to 10 years.....25%  
 11 to 20 years.....45%  
 21 to 52 years.....30%

YEARS ON RTTY

1 to 10 years.....60%  
 11 to 20 years.....25%  
 21 to 26 years.....15%

CLASS OF LICENSE

Technician .....5%  
 General.....17%  
 Advance.....36%  
 Extra.....40%  
 Foreign License.....2%

MEMBER OF AN RTTY CLUB

79% NOT a member of an RTTY club.

AMATEUR RADIO MAGAZINES  
 SUBSCRIBED TO

CQ.....24%  
 Ham Radio.....41%  
 QST.....68%  
 RTTY JOURNAL.....  
 World Radio.....8%  
 73.....54%

HF TRANSMITTER

The survey revealed a varied amount of equipment in use. The order of popularity is as follows: Drake, Kenwood, Yaesu, Collins, Icom, Heath, Swan, Ten Tec, Atlas, Doveson, homebrew, CE 200V. I made no attempt to calculate a percentage but, Drake was

by far the most popular rig. I did find interesting the percent having two or more HF transmitters.  
 one HF transmitter.....66%  
 two HF transmitters.....20%  
 three HF transmitters.....10%  
 four to six HF transmitters..... 4%

HF TRANSCEIVER

I was surprised to find 90% of the readers surveyed had a linear. The order of popularity is as follows: Heath, homebrew, Dentron, Collins, Henry, Drake, Alpha, National, Johnson, Icom and Bandit. The Heath linear was, by far, the most popular with 31%.

HF ANTENNA

The Tri-band beam was the favorite antenna listed. The list is as follows: Tri band beam, Quad, Inverted V, Dipole, vertical, long wire and Morgain. The survey showed the three element tri-band was tops with four element and six elements right behind. 41% in the survey had two or more antenna's. The tops was five.

TOWER

46% stated that they had a tower. The most popular height was 50 feet. The list is as follows: 50, 40, 60, 70 20 and 80 feet.

MASTS

52% stated that they had a mast. The most popular height was 40 feet. Masts listed on the survey sheets were from 3 feet to 70 feet. I was surprised to see how close towers vs masts were- 46% towers-52% masts. Also interesting is that 38% stated that they had both mast and tower.

HF TERMINAL UNIT

The most popular TU was the HAL ST-6. The order of popularity is as follows: HAL ST-6, Doveson, Flescher TU 170, homebrew, HAL ST-5, Info-Tech HAL ST-5000, IRL, DS2000, Robot, Frederick, Minex, MSK-10B, ST-6000, Altronics, Howard, Microlog, FSK 1000.

SUMMARY

I will break now in the survey results and continue in the next issue. I would like to review a few items in summary at this point. The average RTTY Amateur begins to look like this:

Years licensed.....18  
 Years on RTTY.....6  
 Class of license.....Extra  
 Is not a member of an RTTY club.  
 Subscribes to 4 radio magazines:RTTY JOURNAL, QST, 73 and Ham Radio.  
 HF transmitter.....Drake  
 HF linear.....Heath  
 HF antenna....Tri-band beam 3 element  
 Mast.....40 foot  
 HF TU.....ST-6

In the next issue this profile will grow and we will have the complete profile. I hope you will enjoy this survey. The sole purpose was to give the JOURNAL reader input. I will close my column for this month and express again, my thanks to you for the time, effort and expense you put into this survey.

So long for now, George, WA6CQW.....

FROM THE MAILBAG

I regret to inform you of the passing of Richard Wendler, WA3ETN, on 1 May 1981.

Although Dick had no formal training in Electronics, he was the expert in Central Pennsylvania for the famous ST-5 and ST-6 TUs. He spent hours and hours of his own time sorting out other peoples problems. As a result he could always be found in his shop with doors open to anyone with an RTTY problem. He was most responsible for the 200 or so stations on RTTY in this area. He will be sadly missed by family and friends here.

Glenn R. Kurzenkabe, K3SWZ

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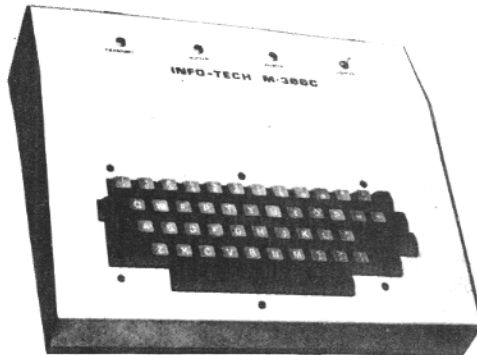
transceivers

receivers.

amplifiers.

antennas

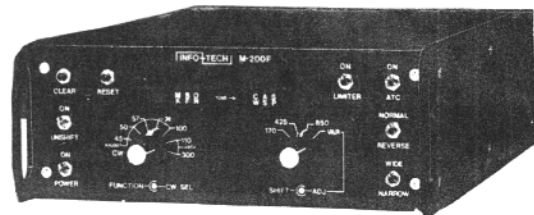
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## WHO SAYS UCSD 1.1 PASCAL IS SLOW!

Chuck Edwards W6MNO  
San Diego, CA

Pascal 1.1 is proven to be fast enough for RTTY software! "CLAIRE" (Computerized Logical Automatic Intelligent RTTY Equipment) shows that pascal does an excellent job, not only as normal RTTY software programming, but also performs beautifully as a mail box, various announcements, WRU, sel-cal, flea market and etc. The amount of automated call-up is considerable yet is so easy to do. This system has been designed by LYNN TAYLOR WB6UUT of Laguna Beach and is offered for sale in complete software format together with a very descriptive manual that simplifies operation. Basically, this system software has been designed for the Apple computer, but will operate equally well with other Pascal computer systems such as the TRS-80, Heath 89. Software for these other systems will be available in the near future.

The idea for a everybody's computer originally came from the Los Angeles Southern Countries Teleprinter Society (SCATS) where Joe W6RRRL first designed such a system using a home brew computer and assembly language software, but is no longer in existence. Lynn, WB6UUT, got to wondering if it was possible to do the same thing with his brand new Apple, only using pascal, rather than assembly? After over three days of designing and testing, he finally found success! He got his Apple to print "HELLO" from strictly pascal software. Now that he knew he could actually print RTTY from pascal software, he started in earnest to design software for a community computer system that could be used by individual RTTY'ers and/or members of the San Diego Teleprinter Society, or any repeater for that matter. Not only has he done this, but he has developed his "CLAIRE" into one of the most sophisticated community RTTY software available, probably at any price.

This latest 2.1 CLAIRE software available from WB6UUT will operate from a single disk, two disks, or more, up to six. Of course, the two

disks are easier to use and have more memory than a single disk. However, being able to use pascal from a single disk is quite an accomplishment.

This community pascal system software package has been in successful operation since February '81 and has been thoroughly de-bugged. Immediate successful operation can be expected. No additional hardware is necessary except for your pascal disks, a transceiver, and terminal unit. Incidentally, this system has been tested on the low bands and vhf repeaters with equal success.

His method of operation does not follow the usual ZW, ZR and other commands that you may be used to, although they can be changed to anything one desires. For example: Say, I wanted to ask "CLAIRE" if there was any traffic for me in her mail box. I would simply cause approximately 10 spaces to occur from the KBD to wake up her built in AUTO START then W6MNO (my call) UUT:WRU (all on same line) then K K and ID and turn off my transmitter PTT. "CLAIRE" will then almost immediately come back with either my exclusive traffic, or to tell me that "there is no traffic for me at this time". Should I send any of the other listed commands, she will, of course, respond with the correct answer and in addition, at the very end, will tell me that I have traffic pending (if I have) but will say nothing, if I have none. In addition to all this, she will completely list all pending traffic after she makes sure there is no activity on the band at discrete intervals. This enables those on auto-start to realize pending traffic without even asking for it.

The following are some of the prime input commands to "CLAIRE" and the returned information therefrom.

UUT:ADD - temporarily adds a new user to "CLAIRE'S" user list.

UUT:BRAG - "brag tape" gives general information about "CLAIRE".

UUT:ECHO - re-sends your last transmission.

UUT:FOX - five lines of "quick brown fox".

UUT:HELP - detailed information about these commands.

UUT:MENU - generates a complete command list.

UUT:POST - mails your last transmission.

UUT:QSL - clears your messages (see UUT:POST).

UUT:QST - current news.

UUT:QTC - lists all traffic pending.

UUT:RY - five lines of RYRYRYR.

UUT:USER - "CLAIRE'S" user list.

UUT:WRU - standard WRU function and mail box call.

These listed commands, as you will note, use the designers call UUT, however, when purchased, the software will be supplied with your call letters or whatever is requested. Full instructions are provided within the accompanying manual.

This "CLAIRE" pascal computer program has provided many hours of pleasure and convenience to the entire San Diego Teleprinter Society users list as well as many others in outlying areas, such as Los Angeles, who can copy our repeater. It is especially ideal as it provides a sel-cal for every user, it provides news events of the club and station activities, it provides a means of testing ones' own station three ways. (RY, FOX and ECHO), a brag tape, etc. New users of this system just can't believe that such a system is possible, or that it is this simple to use.

Because of this, I am very happy to have such a complete systemized community computer program made available to other hams through our small world.

For further information write or call:

LYNN TAYLOR WB6UUT  
463 MYRTLE STREET  
LAGUNA BEACH, CALIFORNIA 92651  
Phone 714-497-2671 or 714-494-1416

\*\*\*\*\*



### 3341 MEMORY FOR THE UT-4

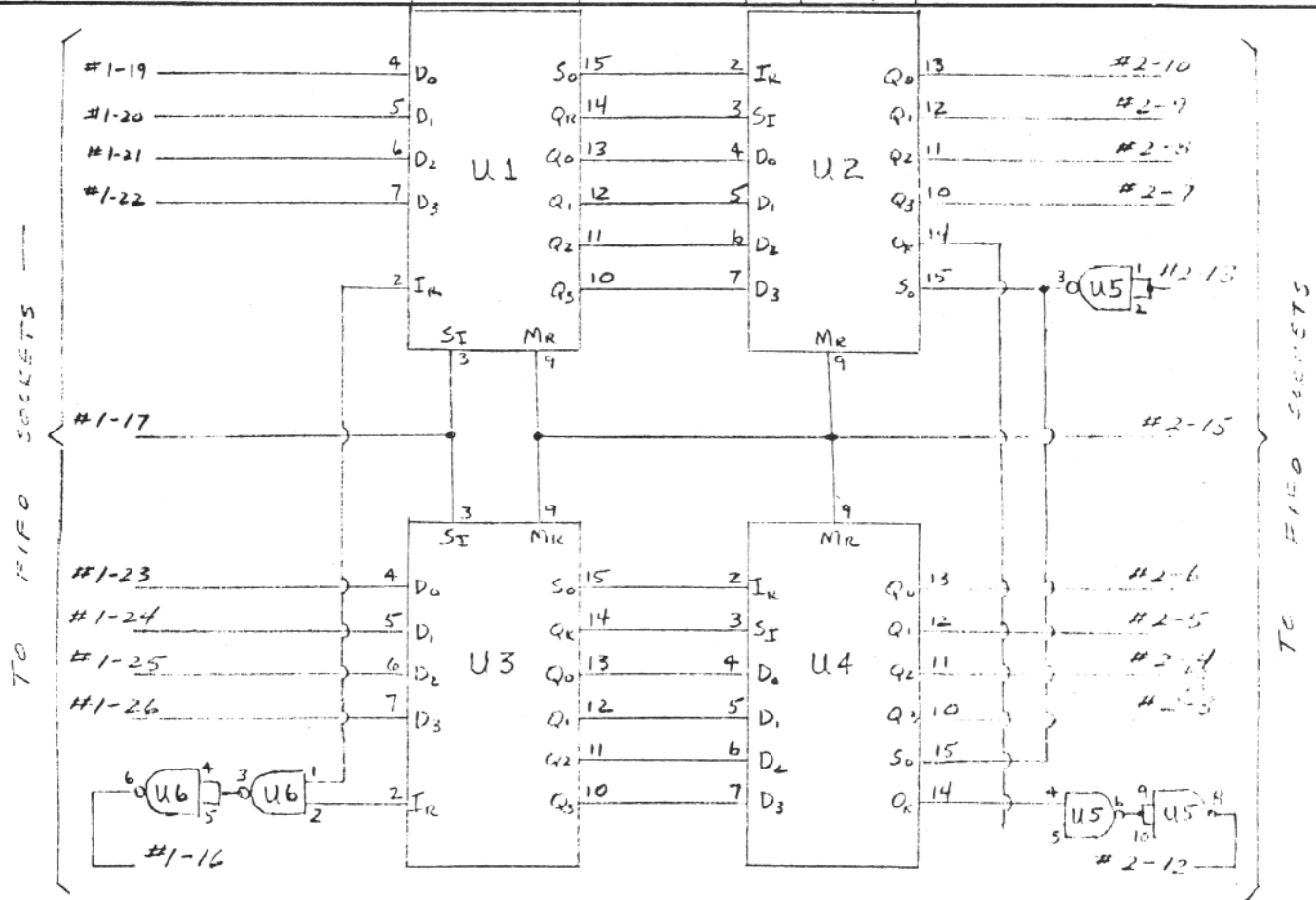
After operating for some time with a haywire arrangement of various boxes, I wanted to clean up the station and incorporate all the RTTY equipment into one package. Included would be Irv Hoffs UT-4 along with the homebrew ST-6 CWID, AFSK and tuning scope. During the planning stages, I learned that 3341 FIFO memory chips were more readily available to me, and at lower cost, than the 3351 chips. I was therefore able to build 128 characters of

memory at a much lower cost than had I used the original chips. The memory was built on a Universal IC PC board and attached to the NUDATA UT-4 circuit board with spacers. The pin con-

nections at the sides of the schematic indicate where the memory circuit wires into vacant FIFO sockets on the UT-4 board. More FIFOs could be added for additional memory, however, the D/A converter would have to be modified as it is only capable of counting 128 characters. This circuit has been use for awhile with excellent results. Ron, KOQVF, was the first I know of, in this area, to use the 3341 and this circuit is an application of his design.

AUTHOR OF THIS IS UNKNOWN TO US AT THIS TIME. EDITOR.

IC #	TYPE	POWER		
		+5	GND	-12
U1,2,3,4	3341	16	8	1
U5,6	7400	14	7	



NOTE: The RTTY Beginners Handbook is not available at this time. We do not have any copies available. The new revised edition will be available after the first of the year. I sincerely hope that this does not inconvenience anyone.

From Murphy: If you explain so clearly that no one can misunderstand, someone will. Procedures devised to implement the purpose won't quite work. After the correction has been found to be erroneous, it will be impossible to fit the original part back into its case.

# • RTTY-DX •

Skip Prinsen, WB6CYA-3611 Merrimac, San Diego, CA 92117.(714)276-3182

## MAILBOX FEATURES AND CONTROL FOR THE FOR THE HEATHKIT H8/H89 COMPUTER

By HANK LA BARBARA, WB9UMK  
4025 W. CHASE  
LINCOLNWOOD, IL 60646

### FEATURES

The operator can save incoming text into a buffer and save it on a disk or hard copy printer.

Mount and change disks while under program control.

The operator can send disk files over the air.

Remote text storage, retrieval, or deletion on disk.

Remote text storage relay without storing on disk.

Continuous output (diddles) when the buffer is empty (this feature can be turned off by the operator.)

Speed is automatically adjusted from 40 to 60 WPM depending on how far ahead the operator has typed. However, it may be set at slower speeds by the operator. WRU and automatic time/date may be requested from remote stations. Automatic copy and relay with appropriate headings and CWID.

On H8 when pretyping, the number of characters is displayed on the front panel leds along with the number of line feeds. The H8 also has CW side tone, H8 and H89 both CWID at 9½ minute intervals.

Automatic wrap around eliminates the need for carriage returns.

Error correction is provided when two or more X's or /'s are typed, eliminating the previous word.

Control shift up allows the programmable line to be reset to any message one line long, such as CQ or the other stations' calls. If not programmed, this line contains a test message. The line can be sent with shifted (up sign). Receiving BK, sounds a beep to alert the operator.

## REMOTE COMMANDS

WRU is activated by your call followed by ZW.

IF :Mail is received, (with the colon) the time and date will be sent.

The following commands are activated only when preceded by your call. ZC=copies incoming into memory for remote relay or mailbox.

ZP=repeats previous transmission.

ZR=relays the previously copied transmission..

ZW=WRU request.

ZU=print version and serial number of mailbox.

ZM=mailbox control.

### MAILBOX REMOTE COMMANDS

)Mail CK: checks for mail in default drive.

)Mail to: leaves a message in default drive.

)Mail DL: deletes a message in default drive.

### EXAMPLE

Assuming that this program is in WB9XXX's computer, and that a station on the repeater is K9ZZZ. Here is how K9ZZZ would use the mailbox:

If K9ZZZ wants to leave a MSG to W9HHH he would type this:

NOTE: Remarks in parentheses are comments and not part of the text.

WB9XXXZC (gets computers attention)

)Mail to: W9HHH de K9ZZZ (command and ID both are required). This is where the message goes, it can be as long as you want it, and as many lines as you want depending on how much memory is in your system and how much room is on your disk. NNNN (turns off computers buffer. WB9XXXZM (writes message to disk).

If K9ZZZ wants to look for messages he would type this: WB9XXXZC (gets computers attention). )Mail CK:K9ZZZ de D9ZZZ (command and ID required). NNNN (close buffer). WB9XXXZM (gets message) (drop your carrier fast the mailbox will be on the air).

To delete a message use the same format as above, but change the second line from )Mail CK:K9XXX de

K9ZZZ to )Mail DL: K9ZZZ de K9ZZZ.

### FILE CONTROL

If the operator wants to protect a file from being deleted, he can do so by using flags and write protect the file. The default extension for all RTTY files is .RTY.

File names for remote access must not exceed 10 characters, (including the period). If the operator wants to keep a file on a disk, and does not want the general public to have access to it, he can use a file name that exceeds 10 characters (XXXXXXX-.XXX=11 characters). Files exceeding 10 characters in length can only be sent by the operator from the keyboard.

The format for remote control is: Command fname space station ID )mail CK:fname de XXX.

A command must appear within the first 50 characters typed after the opening the buffer with ZC. The file name must not exceed 10 characters total, name.ext. the .ext is not required.

While a file is being sent out, it may be aborted by typing a Control C. Control C serves 2 functions depending on which mode you are in. If typing text in normal RTTY mode, it will insert your CWID in the text. If you are in the process of sending a file out, it will abort the file transfer.

All files stored on disk can be edited with any text editor and used with the mailbox. (The ASCII Baudot conversion takes place during the actual data transfer.)

When in the mailbox or file mode, normal HDOS error messages will appear on the screen. These are for the operators information only and are not sent out over the air. When in the mailbox mode and error messages appear, first you will see the HDOS error message, then the mailbox error message. Only the mailbox message is sent over the air. A way to tell what is going out over the air is; if your console is typing slow, it's sending it out. If your console is typing fast, it is not going over the air.

When error messages are being transmitted or files are being sent, you will notice what may seem as unusual characters on your screen. These are the ASCII representation for certain non-printable Baudot characters, and appear visible to show where they are inserted. (@=bell [=diddle) this is helpful if using a text editor to make your files for the mailbox (club announcements etc.).

Also included is a file called info .RTY. This is not needed to run the mailbox but is put there as a convenience for new users. They can access the mailbox and substitute "INFO" for the MSG they are checking for like this )mail CK:INFO de their call.

This file should be edited to fit your needs. Put in your calls and any thing else that may be of interest. You can also put in files like news. RTY to keep up with club membership applications.

More than one mailbox can be used on one repeater. Since each mailbox will only respond to its operators call letters, the only thing that must be avoided is the use of the :Mail command. This would cause all of the mailboxes on frequency to come up and print the time/date.

At first this may seem difficult to operate, but after playing around with it you will get the hang of it. The program was written with the intent of not having the transmitter come up unless it was specifically told to do so. That's part of the reason for the remote access sequences.

This program has been tested and used well over a year by several Hams and has proven to be "bug free". But bugs have a unique way of showing up. So if any problems are found, please document them so that they may be reproduced here and corrected.

Special thanks go to Irv Hoff for his support and cooperation in making this program possible, as a great deal of the RTTY portions of this program are based on his IMH42 series and used with his permission.

I have used this program and it does meet all of the specs that are listed as to what this program will do. Only thing found wrong with it... it was a bit hard to use when another mailbox program for the Apple exists. "Skip" WB6CYA.....

#### KONTEST KORNER

WAEDC	14-15 Nov. '81	Apr.81
GARTG	10-11 Oct. '81	Apr.81
CARTG	17-18 Oct. '81	Jul.81
Australia-Oceania- and Asia		
Flash	January '82	coming
BARTG	March '82	coming

#### W.A.C. RTTY AWARD

Paul R. Winchester G4KHX  
44 Severn Way  
Bletchley  
Milton Keynes,  
Bucks, MK3 7QQ England  
Paul receives his W.A.C. Award for working a country in each of the recognized continents. This award was issued on September 1, 1981.

#### HAM HELPS

Charles has a Yaesu 707 transceiver and a Teletype mod 43 printer that he interested in getting hooked up to receive press wireless bulletins. The 43 is equipped with a Bell system data set for use on a dial-up telephone access to computers. Can anyone provide and help or information to get him on the air? Charles O'Neill, 2690 Wild Dale Rd., Baldwin, NY 11510

#### CONTESTS

GERMAN	AMATEUR	TELEPRINTER	GROUP
Place	Call	QSO's	Score
1.	SM5EEP	80	49,140
2.	HA1ZH	71	27,640
3.	JA1XGI	37	12,330
4.	HA5KBM	49	10,353
5.	HA5LP	51	6,122
6.	I3BQC	40	3,648
7.	SP2JPG	41	2,700
8.	SM3GOM	24	975
9.	JA1PX	14	660
10.	DK4IS	6	30
11.	JA2CGS	2	4

#### SWLs

1.	Gerhard Neff	38	5,210
2.	Kurt Wustner	36	2,688

154 stations from 6 continents participated in this contest.  
Second part of this contest is October 10-11. Send logs to:DL8VX, POB 901130, D-2000 Hamburg 90, West Germany.

#### 1981 AUSTRALIA, OCEANIA & ASIA FLASH

PLACE	CALL	COUNTRIES	SCORE
1.	I8AA	79	23,691,060
2.	EA8RU	70	23,230,200
3.	UK4FAD	63	12,590,650
4.	I2DMI	59	10,927,100
5.	I8JRA	56	10,237,100
6.	G3HJC	59	9,218,790
7.	OZ1CRL	45	6,426,600
8.	OK3KII	43	5,357,800
9.	ISØRUH	43	5,282,550
10.	JA3ZRT	24	1,602,930
11.	OK3RMW	26	1,553,500
12.	OK3VSZ	26	1,488,500
13.	DK1BX	20	1,080,555
14.	G4KHX	24	988,900
15.	OK3BJT	23	980,000
16.	SM6ASD	21	976,500
17.	DK1RV	19	845,500
18.	WØLHS	20	696,000
19.	G3RDG	17	690,200
20.	ON7AZ	23	583,222
21.	OK3RJB	18	572,400
22.	FG7AK	23	506,000
23.	SM6AAY	17	479,400
24.	VE2AXO	17	155,550
25.	FM7BW	11	118,800
26.	SP3CMX	6	12,600
27.	SP1PBW	6	4,800

#### S W L

1.	Stig Kahr	59	14,443,400
2.	Kurt Wustner	48	7,510,000
3.	Ballenberger	49	6,726,488
4.	OK1-11857	45	6,646,500
5.	OK1-20677	20	1,715,200

For the contest buffs among us, watch the Kontest Korner news in the next few issues. San Diego Teleprinter Society, 73 Magazine and the RTTY JOURNAL will be jointly sponsoring a worldwide RTTY contest. As soon as the ground rules have been established we will let all of you in on this new contest.

It should be a good one, for we will be trying new areas and new methods of assigning point values.

So, keep in mind the big new contest that will be announced shortly and look for the details in one of our next issues of the JOURNAL.

73's de DEE, N6ELP

# CLASSIFIED ADS

30 WORDS \$3.00 ADDITIONAL WORDS 5¢ EACH CASH WITH COPY--DEADLINE 1st of month for following month.

WANTED, HAL DS3100 and Ameco Pre-selector PT-2. N8ES E.Shafer, 3479 Kersdale Rd., Pepper Pike, Ohio 44124 Phone 216-831-9198

CLAIRE: The finest computer RTTY bulletin board/mailbox software. This system, running under UCSD Pascal, has been designed for ease of use. Will support almost any interface without major modifications. 10 commands supplied, others may be easily added. 1, 2 or more disk drives supported. Only \$129.95, or send \$10.00 for users manual, refundable with purchase. Software currently available for the Apple, other systems please inquire. Lynn Taylor, WB6UUT, 463 Myrtle St., Laguna Beach, CA 92651 (714) 497-2671 or 494-1416.

WANTED: TELETYPE LESU-68 for Model ASR; also LESU-11 (Bell System 28C Electrical Service Unit) or LESU-13 (Bell 28F) or LESU15 (Bell 28G) and Modification Kits 164120, 164633, 164640. All replies answered. Bill, W4NZY, 119 North Birchwood Avenue, Louisville, Ky. 40206

BARGAINS GALORE, teletype machines, paper & tape winder, modems, etc. State your wants--must clean warehouse. SASE for reply. C.B. Goodman, 5454 South Shore, Chicago, IL 60615 (312) 753-8342.

TELETYPE, KLEINSCHMIDT repair parts wanted, unused. M 14 thru 40. Possibly can pick up at your QTH. Cash or trade for any quantity. Write TYPE-TRONICS, Box 8873, Ft. Lauderdale, FL 33310 or phone 305-583-1340 after 10 PM EST. Send SASE for list of parts, gears, ribbons, supplies, toroids. Fred Schmidt, N4TT ex W4NYF

FOR SALE: 6th edition of the "LIST OF RTTY STATIONS IN FREQUENCY ORDER", now contains 1717 frequencies monitored in 1980-81 of commercial stations like press, aeronautical, weather, telex, military, diplo, maritime etc. on shortwave. Schedules of 82 news agency stations on 641 frequencies, and 178 special abbreviations are also included. This offset printed list is airmailed to you for \$17.00 (check or cash) from Joerg Klingenfuss, Panoramastrasse 81, D-7400 Tuebingen 7, West Germany.

THOUSANDS OF COMMERCIAL RTTY STATIONS are active between the Amateur short-wave bands. Many of them can be easily printed with your existing equipment. (Take care of legislative restrictions if applicable!) If interested, you need "software", compiled from nonstop monitoring the complete shortwave spectrum. I have up-to-date frequency, callsign, schedule, code lists on press, military, diplo, telex, aeronautical, weather, etc. stations. Write for details. Joerg Klingenfuss, Panoramastrasse 81, 7400 Tuebingen 7, West Germany.

FOR SALE: "LIST OF NEW RADIO REGULATIONS DECIDED AT WARC 1979", containing the original texts of those new Radio Regulations (RRs) which are of essential interest to radio amateurs. They cover: terms and definitions, designation of emissions (completely revised!), frequencies, call signs, broadcasting service, amateur service The chapter dealing with frequencies contains the new Table of Frequency Allocations from 9 kHz to 150 MHz including all footnotes. Most of these new RRs will come into force on 1 Jan 1982. The list is compiled from official ITU documents and also includes the agenda and the final acts of the Conference. This offset printed and hardbound book is airmailed to you for \$16.00 (check or cash) from Joerg Klingenfuss, Panoramastr. 81, D-7400 Tuebingen 7, West Germany.

WORLD PRESS RADIOTELETYPE station lists. Over 50 different worldwide press services contained in three lists. By time, by frequencies an ITU combination list. All transmitting in English. 24 hours. Hundreds of confidential and fascinating RTTY news stations in these up to date lists. Utilize your present equipment Book with lists, \$5.95 + .50 shipping Universal Electronics, 1280 Aida Dr. Reynoldsburg, OH 43068

WANTED: SPARE PARTS for Teletype Corp., Kleinschmidt Corp., and Mite Corp. machines. Please send list. Phil Rickson, W4LNU, P.O. Box 70, Morrisonville, NY 12962

WAREHOUSE SALE: Must clear our teletype machines immediately at fantastic savings. Have everything from Model 14 through 35. Large Discounts. List available or call ED at Atlantic Surplus Sales, 3730 Nautilus Ave., Brooklyn, NY 11224. Tel: (212) 372-0349 SALE! SALE! SALE! SALE! SALE! SALE!

Heavily inked UPI Ribbons, fit all Teletype machines, \$6.50 dozen; Perforator Tape 11/16" wide x 8" diameter, case of 40 rolls \$19.50; Strip printer tape 3/8" wide, white, ungummed, box of 25 rolls \$12.00; Roll paper, white or canary, 5" diameter, case of 12 rolls \$29.00 or \$4.00 per roll; Model 28 TD self contained, stand alone \$99.00; Model 28 stand alone typing reperforator with 3 speed gearshift \$120; Single Speed \$99.00; Model 28 TD self contained, stand alone with 3 speed gearshift \$225.00; Model 28 Auxilliary Reperforator type LARP, complete with motor, base & mounting studs to fit inside model 28 ASR cabinet above TD \$65.00; Gears: Model 28 ASR 100 wpm printer \$9.50, TD \$10.50. Also available everything you need from Model 14 to Model 35 machines and parts. All prices are FOB Brooklyn NY. Call for price. Atlantic Surplus Sales, 3730 Nautilus Ave., Brooklyn NY 11224 Tel: (212) 372-0349.

MOBILE RECEIVE ONLY TELEPRINTER ASCII Code, 100 wpm. Unit intended to be mounted in car underdash, however, could be used in boat. Power required 12 Volts D.C. Teleprinters are solid state in design and use digital stepper motors for type font and indexing Prints using a ribbon and roll paper. Set has built in AFSK Demodulator, Selective Calling, Ribbon reinker, Auto carriage return line feed features. Teleprinter appears to be in excellent condition and documentation available with purchase. Physical size 13" x 9" x 4". Not going to see many of these around, especially at \$450.00. Call ED WA2FBY (212) 372-0349 or 3730 Nautilus Ave. Brooklyn NY. 11224

# VHF NEWS

JOHN CUNNINGHAM WA9WJD, P.O. Box RY, PERRYVILLE, IN 47974



Well here it is October and the Ham fest season is about to come to a close. I have seen quite a bit of RTTY gear muscled out to the parking lot. This to me would mean there are some new guys wanting to get on the air. These guys will be needing help getting the boat anchors hooked up and running. They will need someone to show them how to make all of the goodies perform like the guy said they would, you know he would not stretch the truth about a thing like that Hi! Hi!.

Okay, what am I driving at? Well the fact is there are guys out there wanting to get on RTTY this fall. They have put out their "mad money" for the gear, now they want to see the stuff work. We, who are already on RTTY can take them a copy of the JOURNAL and then, show them how to get the stuff up and running. It gives you a real great feeling to see the big smile on a guys face when he sees the print on his own machine the first time.

In the fall as the weather gets worse we will be spending more and more time inside. This means more hobby time. It also means that people have more time to investigate a new hobby. We can take advantage of this by making ourselves more visible. You can set up your gear in a mall, visit a scout meeting, a radio club meeting or a school. School kids are very enthusiastic about this kind of thing, scouts are the same way. On one mall we found that a lot of the older folks expressed great interest.

Now don't tell me it is too much work to take the RTTY gear, I know that all too well! I have set up at many places and it is always a worth while task. One of my favorite places for a demo is at a Hamfest, you have people there who already have a license and all you have to do is show them how much fun they are missing by not being on RTTY. There are several RTTY ops in this area who became interested by seeing my gear at

at the Danville, Illinois Hamfest for the past three years. Our club has even had RTTY gear (a model 19-no less) on a float in the Labor Day parade.

If I have succeeded in inspiring you to get off your duff and get a demo organized, how about sending me a note about it? Maybe even a nice high contrast black and white pix.

Okay, John, off your soap box...Hi Hi.....

The Stark RTTY Group in Massillion, Ohio is a real active group. I really enjoy their newsletter (hint-hint). Here are a couple of things from recent issues: save the little cups that come with some liquid cold medicine, they are handy parts holders. Second item- there is now a six meter repeater in the Massillion area operated by WD8IPR, frequency is 52.63 in and 53.63 out.

At the Indy Hamfest, I found out that there is activity on 146.40 simplex in the area north of Indianapolis. This word comes from Bill, WD9-AQA.

73 and CUL on the green keys  
John, WA9WJG



TELETYPE 28ASR \$150, 28KSR \$100, 28RO \$75, 15KSR in floor console \$50, 15RO \$35. Wanted! NAVSHIPS 0967-173-7010, 0967-173-6020, N4BRX Dave Hamilton, 413 Seneca Ave., Louisville, KY 40209 (502) 368-7845.

INFO-TECH VIDEO TERMINAL for RTTY, ASCII & Morse, Model 300 keyboard, M200E & Sanyo Monitor, mint. \$800.00 K3KD, 215-754-6286.

COMPACT 28RO \$250, 28KSR \$175, 35RO in 28 cabinet with power supply \$175, all above re-wired, checked out and ready to plug in. Bill Parker, K8NCV, 984 Amelia Ave., Akron, OH 44302.

FOR SALE: HAL 2000 KSR & ST-6000 complete with video. Neal Bloomer, WB7NFK. POB 398, Joliet, MT 59041. Phone 406-962-3939 evenings.

FOR SALE: MICROLOG RTTY Outfit consisting of an AKB-1, keyboard and an AVR-2-video generator TU-both items have all options installed. Fine condition. Currently sells for \$1400 want \$700. Phone 213-997-0167. Van Nuys, California.

FOR SALE: ASR28 with dome mounted re-perf (with gear shift). Excellent condition. Included 10 rolls paper, 1 box of tape \$200. KSR28 (table model) including cabinet, base, keyboard and motor \$35. ST-6 TU (XTAL tones) 3 shifts, excellent condition, professionally wired \$275. New power transformer for Collins, 30-L-I linear \$50 W.L. Brown, K5FL, 425 Magnolia St., Denton, TX 76201. 817-382-0351.

WANTED--FREDERICKS TTY EQUIPMENT-- State model, condition and price. Ben Grokett, KR6E, 1127 Shirley Dr. #3, Milpitas, CA 95035.



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<sup>1</sup>Use your own high voltage loop supply.

<sup>2</sup>External modem recommended for 300 baud.

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FROM THE EDITOR



Vacation time is over and everyone is back to work. The RTTY JOURNAL staff is no exception. So I thought that you might like to see some of the people working behind the scenes in order to get the JOURNAL to you.

At the top is Skip Prinsen, WB6CYA. Skip does the DX column, Ham Helps and Kontest Korner. He is also the one that answers the questions readers send to us, and keeps tabs on all of the contests.

I had to put Skips' picture first because he looks so very different from the picture that used to be at the top of his column. The Navy made him shave the beard off and what a change it made. I walked right past him the first time I saw him at the San Diego Teleprinter Society meeting last month.

In the center is Gisela Dennert doing just what she is so good at. Typing the JOURNAL and recently typing the New Beginners Handbook, due to be back from the printer around the first of the year. Gisela is not a Ham but is interested in computers. (She is also single and was born in West Germany). Line forms to the right boys.



Last but not least is George Hammon, WA6CQW. George looks a bit different from the usual picture formerly on the top of his column Hits and Misses. I believe George has lost some weight. He looks good. George and wife Jean live in El Cajon, about sixty miles from us, so we do not get to see them as often as we would like. But George will be getting his 220 some new crystals to link up to Skip and me.

Hope to see all of you in Scottsdale, Arizona October 9, 10 and 11, 1981. George and Jean will be there in their motor home and John and I will have a hospitality room for the RTTY gang to gather in to wet their whistles and spin a few tall tales (RTTYers would not stretch the truth would they?)



Will try and have a picture of John Cunningham in one of our next issues. I took a picture of him in Dayton but it did not turn out well. Guess it is hard to get him to stay still for a picture he is quite busy going to most of the mid-west RTTY/Ham happenings.

Circle the last week-end of April and come to the Dayton Hamvention next year. The RTTY-ers gather at the Imperial House North.

In May of next year the Amateurs will be in San Diego along with the computer buffs, that should be a great Convention. Try to attend.

73 and 88 de Dee, N6ELP.....

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