Journal

JULY-AUGUST 1981

VOLUME 29 NO. 5

75 CENTS

EXCLUSIVELY AMATEUR RADIOTELETYPE



HAM SHACK OF JOHN, KA6NYK AND DEE N6ELP

CONTENTS

RADIOTELETYPE TRAFFIC HANDLING PAGE 9
DRAKE TR-7 CONTINUOUS SPECTRUM PAGE 11
NOTES ON DAYTON HAMVENTION PAGE 14

RTTY JOURNAL

Dee Crumpton, KA6NYW Editor & Publisher P.O. Box RY Cardiff-by-the-Sea. California 92007 U.S.A.

John P. Goheen.KA6NYK Associate Editor

THE RITY JOURNAL IS PUBLISHED 10 TIMES PER YEAR. MAY-JUNE & JULY-AUGUST ARE COMBINED.

Second Class permit Encinitas, CA 92024

Business Offices 1155 Arden Drive Encinitas. CA 92024

POSTMASTER SEND FORM 3579 to: POB 179 Cardiff.CA 92007

BACK ISSUES

A duplicate of any back issue may be obtained from Red Wilson, 4011 Clearview Drive, Cedar Falls, Iowa 50613. \$1.00 Postpaid. Reprints of all UART articles \$2.00.

SUBSCRIPTION RATES

USA	\$ 7.00	per	year
Canada, Mexico	\$ 7.50	per	year
Canada Air Mail	\$ 8.50	per	year
Mexico Air Mail	\$ 8.50	per	year
Foreign	\$ 8.50	per	year
Foreign Air Mail	\$ 13.50	per	year

All above must be by check, cash or money order in USA dollars only...

Published on or about the 20 th of the month, 10 times per year.

FOREIGN SUBSCRIPTION MANAGERS
THE FOLLOWING MANAGERS ARE DROP SHIPPED THE RTTY JOURNAL ON THE SAME DAY THE RITY JOURNAL IS MAILED BY SURFACE AND AIR MAIL TO THE REST OF THE WORLD. IN SOME CASES AIL MAIL GETS TO OUR READERS FASTER THROUGH OUR MANAGERS. IN OTHER CASES IT DOES NOT. HOWEVER, IT IS NOT AS COSTLY TO GO THROUGH MANAGERS.

FUROPE

JEAN HURTAUD, F8XT CHILLAC 16480 BROSSAC, FRANCE

AUSTRAL IA

NORMAN WILSON, VK4NP POB 81 ALBION, BRISBANE QUEENSLAND. 4010 AUSTRALIA

FNGL AND

DR. ARTHUR GEE, G2UK 21 ROMANY ROAD, OULTON BROAD LOWESTOFT, SUFFOLK NR32 3PJ, ENGLAND

JAPAN.

KANJI YAMAMURA. JH2FHX 2-42 UMENOKI, IZUMI-MACHI TOKI CITY, GIFU-PREF JAPAN MAIL NO.509-51

REPRODUCTION OF ANY PART OF THIS MAGAZINE, IN ANY FORM, IS STRICTLY ENCOURAGED. IF CREDIT TO THE AUTHOR AND THE RTTY JOURNAL IS GIVEN. THE PUBLISHER ASSUMES NO RESPONSIBILITY FOR ERRORS OR OMISSIONS, NOR IS ANY LIABILITY ASSUMED FOR DAMAGES RESULTING FROM USE OF INFORMATION IN ANY RTTY JOURNAL.



• RTTY-DX •

Skip Prinsen, WB6CYA-3611 Merrimac, San Diego, CA 92117.17141276-3182

GREETINGS TO ALL....

The VK/ZL/Oceania contest is over and I am sad to report there was not much activity from the States at all. I think that part of it was due to the fact that we at the JOURNAL never received the rules for the contest. I got a copy of them from the CARTG newsletter that I get each month. Hopefully, next year we will have the rules in time to get them into print, so that we can get a better turn out. I'd sure hate to see this contest stopped.

KØBJ, Bruce wrote me that the VP1RY trip was a big success for the other operators but he has keyboard problems and was unable to get on the air with RTIY as he had planned. They had 950 CW/SSB contacts from UP10A and they made 4300 contacts during the WPX contest. Bruce mentioned that there may be another group putting RTIY on from Belize sometime in the next year so keep your fingers crossed.

Larry, K1LPS writes that he made an error during a recent contest, and would like me to remind all of the U.S. Amateurs that on 40 and 80 meters that the RTTY operation is not at the usual place as it is on 10, 15 and 20 meters. Look for the contesters from 3600 down about 25 kHz and on 40 look around 7040 kHz. Also, look up the band for the operators that might be looking for contestants in the commonly used parts of these bands.

WB4YSJ, Jim Little will be in Korea in September for one year and says that he'll be operating RTTY from there if he can get a permit. It looks like we'll have another RTTY operation from HL land soon.

As a reminder to all that live outside of the USA due to the mail problems that we have in loss of QSI cards, the RTTY JOURNAL will accept photostat copies witnessed by officers of your National Amateur Radio Group that the copies are true

copies and also a listing of the countries in prefix order with the callsign, date, time, report, and band of operation. This we hope will help in keeping the cards from becoming lost in the mail systems of the world! Hi! Hi!

Does anyone have a current address for Al Copper, WA6FQN? His mail has been reported to have been returned "Addressee unknown."

There has been am awful lot of activity this month and I wish to thank all of the Hams that have given their time to drop me a line to let me know what they are working from their part of the country or world. The following is a list of the Amateurs that sent in data for this issue: F8XI, JA8ADQ, K1LPS, W3FV, W3KV, K3SWZ, WA3ZKZ, K4VDM, W5HEZ, K5WTA, WA6CQW, KØPJ/6.

Warrick is still not on RTTY yet. He will be on shortly and you can work him on CW at 14.050 or SSB at 14.220 around 0900Z.

KX6QC Ennylabegan Island from 0500-0700Z and again at 1100Z QSL via Cliff Sides, POB 65, APO San Francisco 96555.

FR7AT Jean is on 21 MHZ. at 0100Z using a computer.

CT1APF Paulo is new to RTTY on 14.100 at 0100Z he is slow but learning rapidly.

AP2MQ, C5ACL Luis, Via EA8JS, Box 814 Canary Islands, CP6EL Alfredo Pauker 20 meters 0100Z, DU1MEL Via K9MD. DUIRBN, EAGGV Baleric Islands 0500-0600Z, FG7BG George Capesterre 97139 Guadelope West Indies, FK8CL, FM7BW 20 meters 0230Z, FP8HL Henri 20 mtrs 1830Z, GW4EVJ George using 50 baud. HA5KBW, HL9JV 20 mtrs 1200Z, HP1DJ Dario box 9782 Panama 4. HP1FB Francisco, KP4ARY, KP4EPF, KS4DV, OE8AJK/ YK Alfons UN peace keeping forces Golan Heights OE8LKK, OK1JKM, OX3PT Peter, OZICRL, PT2CRR Brazil, PY8ZBG, TI2JP, TI2XG, TF3HI, TJ1CK 20 mtrs 05-06Z QSL via DL1HH, SP9BQT, S8AAA Transkey *note does not count for

DXCC!, SV2NE Siros 20 mtrs 0600Z Box 483 Salonika, Greece SV1MO, TR8WR 14-16Z via F6ERG, TU2JJ via KNOKCW, UA4-LAB Ulyanousk 20 mtrs, 02-03Z, UAOCBO Khabrousk, UT5RP 20 mtrs 04Z. UV3FD. UP2AW, UP9GE 20 mtrs 0000Z, YB2BL Niko 1200Z box 98 Yoga Indonesia, YB7ACZ via W5IMJ/W4 POB 63 Santo New Hebrides, YS2MFI, YS2RU, YS2CS 20 mtrs 1500Z, YV5GSZ, YZ1VB Brazil, ZB-2CF, ZP9CW, ZP5GLS via W3HNK, ZS3B. ZS3L via DJ4LK, W3ATE/8RI Guyana John Gregory 10017 Coach Rd. Vienna, VA 22180, 4X6CV counts as Isreal, 5NOCJC Gerard Box 5290 Lagos Nigeria, 5Z4TV POB 30592 Nairobi Kenya, 8J5Sun Solar Expo counts as a JA5, 8P6MZ, 9K2KA 20 mtrs 2300Z box 30 Safat Kuwait Adnan, 9X5SP Rwanda 15 mtrs 1200Z. 9X5KE on 21.360 will set up a sked for you, 9U5JM, 9Y40S.

Sorry to report that Franco Fanti, I4LCF fell and fractured his shoulder during a recent holiday. As a result there will be a delay in the scoring of the Asia/Oceania and the North/South America contests.

AWARDS SECTION

ON4BX 190 Countries sticker W3KV 180 Countries Sticker K7BV 180 Countries Sticker I5FLN 140 Countries Sticker

DXCC AWARDS

#55 IØAOF Giuseppe Loreti #56 SM7CLZ Gosta Nathell #57 DK5WJ Jurgen Schlenger #58 ON5WG Georges Werts W.A.S

IØAOF all on 20 mtrs dated 15 Apr 81.

Y03AC on 20 mtrs dated 3 Nov 80 #89 JR2TZL on 20 mtrs dated 12 May 81 #90 N9BHH Mixed bands dated 8 Apr 81 K4VDM all on 15 mtrs dated 4-5-81 #18

DXCC HONOR ROLL FOR JULY 1981

ON48X 200/200 7. W3DJZ 179/173

2. ON4CK 194/194 8. DK3CU 176/173

3. W3KV 190/190 9. W2LFL 172/169 4. K7BV 194/189 10.I5WT 161/161

5. ON4CK 186/181 11.F8XT 161/154

6. I8AA 176/176 12.W4CQI 159/154

BY POPULAR REQUEST...

The Best Features Of Two Proven HAL RTTY Models
Are Now Available In ONE Convenient New Unit—
The

DS2050 KSR



- Self contained RTTY and CW terminal —RTTY demodulator is now internal!
- Best features of BOTH the DS2000 and ST5000 in one package.
- Simplified connections to your transceiver with standard phono connectors.
- Front panel tuning meter (rear panel scope connectors).
- Both 170Hz and 850Hz shifts for receive and transmit.
- Full high voltage loop¹ compatible for printers, keyboards, and tape transmitters (TD's).
- Full length 72 character lines—24 line screen.
- Pretype either 255 character transmit buffer or the full 1728 character screen.

- Two programmable HERE IS messages with CW ID.
- Keyboard Operated Switch (KOS) for automatic TX/RX control.
- Bright-dim display of received or transmitted text.
- 1-100 wpm CW; 60, 66, 75, 100, 133 wpm Baudot RTTY; 110 or 300 baud² ASCII RTTY.
- Word wrap-around, Unshift On Space (USOS), and Synchronous Idle Transmit.
- Edit as you type with WORD transmit mode.
- Built-in demodulator is a proven ST5000 demodulator, not a simple compromise.

¹Use your own high voltage loop supply. ²External modem recommended for 300 baud.

WHEN OUR CUSTOMERS TALK WE LISTEN



HAL COMMUNICATIONS CORP. BOX 365 URBANA, ILLINOIS 61801 217-367-7373

DS2050 \$649.00 MR2000 \$169.00 ESM914 \$169.00

*CONTESTS*CONTESTS*CONTESTS*CONTESTS*CONTESTS*CONTESTS*CONTESTS*CONTESTS*CONTESTS*

C.A.R.T.G

The Canadian Amateur Radio Teletype Group (VE3RTT) Sponsors.

RULE SHEET

- 1. Test Period: Saturday, October 17 0200 GMT to Monday, October 19th 1981 0200 GMT. No more than 30 hours of operating permitted. Non-operating periods can be taken at any time during the contest, but summary of times on and off must be submitted with score.
- 2. Bands: All bands 3.5, 7, 14, 21 and 28 Mhz.
- 3. Classifications:a) single-operator
- b) multi-operator (one transmitter),
- c) S.W.L. printer.
- 4. Messages: to consist of RST, Time GMT and zone .
- 5. Exchange points: All two-way RTTY QSO's with ones own Zone counts 2 points. All other contacts will receive points listed on CARTG zone chart.
- 6. Multipliers: Country status as ARRL countries list, KL7, KH6, W/K, VE/VO and VK districts counted as separate countries. Stations not to be counted more than once on any one band. Additional contacts counted on different bands. One's own country counts as a multiplier.
- 7. Scoring: Total exchange points x number of countries contacted x number of continents (max.6). Two hundred bonus points for each Canadian contact made on all bands. added to final score.
- 8. Logs: To contain band, date, time GMT, RST, call signs, exchanges sent and received. Use separate log sheet for each band. Send SAL or IRC's to CARTG for log sheets and zone charts. logs must be received before January 1, 1982 to qualify. Send logs, time summary and scores to:

CARTG, 85 Fifeshire Rd.,Willowdale, Ontario, Canada M2L 2G9.

AWARDS: Top 10 scores, engraved plaques, donated by "RTTY JOURNAL",

Green RTTYer plaque, S. Burnett Memorial plaque, Canadian high score, "president CRRL award". Low power Canadian station, West Coast Canadian award, Most Canadian stations contacts, sponsored by VE2JR, High score for multi-operator station plaque CARTG, High score for SWL plaque. CARTG. Certificates to be issued to top scores in each USA, VE/VO and VK districts, and each country. Good luck in the contest!

1980

Canadian calls heard in the CARTG "Big Smoke" contest numbered 37, the best Canadian participation to date. VE4UA claimed "Green RTTYer" status and we welcome them to our annual contest.

Comments:

SM6ASD-the test was blessed with very good conditions especially on the three top bands.

VE2JR-Conditions were good, where were the new RTTY ops hiding??

The CARTG extends congratulations to all winners, and thanks to all contestants in the contest. Much appreciate the publicity provided by RTTY groups and publications worldwide, and thanks to all donors who contributed plague awards.

See you all in October......CARTG

B.A.R.T.G

From Ted Double we hear that the 1981 contest was quite a success. 4 Polish stations were active for the first time since being granted RTTY as a mode in November of 1980. A total of 63 stations managed to work or hear ALL CONTINENTS which is about twice as many as last year and no less than 5 PY sent in entries improving the entry into South America. The appearance of YB2BLI and also YJ8TT in the New Hebrides (now Vanatau) caused a stir and at one time these stations were copied here in the U.K. working each other so the opportunities are there.

As a result of this contest 17 new Quarter Century Awards are being claimed.

Many stations were seen to be using various forms of electronic keyboard and the use of microprocessors to store or record contest information continues to increase. I hope we do not get to the point where the station is left to run itself while the owner goes off to play golf!

Thanks to all those groups and clubs giving advance publicity to the event. Ted Double G8CDW.

WHY CONTESTING?

Very few people are born contesters contesting is a learned skill! MAny Amateurs cannot fathom why someone should sit at the Green Keys for 36 hours (with minimum breaks) working a contest. Sounds too much like work. We will all concede that to be good at something takes a personal commitment, and serious or not, contest operation can be good for you and for our hobby.

First, contest operation improves the efficiently at operating. Leisurely rag-chewing is certainly fun. but it does not help the speed and accuracy of operation. If you are ever called upon to operate under emergency conditions, you will need both speed and accuracy. In some situations you might get only one chance to copy a piece of information that is of vital importance. Contesting allows you to determine how good an operator you are. By participating you learn crisp operation, no wasted words, no wasted motion. You learn how to listen, and how to organize your thinking. These are keys to success in an emergency. Even if you increase your operating efficiently slightly, you've helped yourself.

The second reason contesting will benefit you is that you will learn the capabilities of your station. Most equipment is never used to its full capacity, and operating a contest will pin-point the weak links in your gear. If you get into contesting you will begin experimenting with ways to make your station more effective

continued from page	1981	B.A.R.T.G	RTTY	CONTEST	RESULTS
13.I5KG 163/153 43.WA6WGL 109/98	NO. CALL	POINTS	TOTAL QSOS		
14.W5EUN 156/151 44.K4VDM 109/97	 W3EKT 	598000		56. G4EEV 108	756 90
15.JA8ADQ 149/147 45.WB6CYA 105/95	2. I5FZI	577720		57. G2PB 106	
16.W1GJK 148/145 46.WØHAH 99.90	3. EA8RU	537544		58. ZS3L 106	
17.G6JF 140/140 47.K4DVM 93/88	4. W3FV	466334		59. G4KHX 103	
18.W8JIN 136/133 48.0N5WG 103/85	5. K7BV	445760		60. G4IPZ 102	
19.W3EKT 136/130 49.SM6ASD 94/81	6. G3HJC	436028		61. DJ1QT 101	
20.I5FLN 131/130 50.KØPJ/6 97/79	7. WB3CCZ	380820	,		930 101
21.K6WZ 136/126 51.W5HEZ 93/78	8. W4CQI	377936			310 81
22.F5JA 132/123 52.WØMT 82/78	9. GM3ZXL	377140			390 75
23.IØAOF 145/120 53.0N4PL 97/76	10. SM6ASD	373430			200 74
24.W2IUC 128/120 54.WA6CQW 85/76	11. I1TXD	368340			840 72
25.W3FV 136/118 55.WØMT 79/76	12. W2IUC	327320			448 70
26.JA1DIS 127/118 56.ABØY 85/75	13. I5GZS	313720			372 51
27.K3SWZ 121/117 57.WB2VTD 83/68	14. I8JRA	311850			912 73
28.W3FV 130/115 58.K1LPS 75/62	15. OZICRL	301172			620 73
29.VK2SG 127/115 59.K1NVY/7 84/59	16. W6J0X	298176			080 61
30.W2PSU 122/113 60.W8CAT 66/59	17. DJ6JC	288900			222 55
31.KØBJ 118/110 61.WØLHS 73/54	18. GI4AHP	282690			776 54
32.DK5WJ 115/109 62.DF7FB 65/53	19. WØ HAH	278154			762 59
33.DJ8BT 111/106 63.ON7AZ 62/51	20. EA8XS	261796			280 60
34.W2PSU 106/106 64.WA9AKT 63/48	21. I5HZZ	245168			760 72
35.0N5WG 118/104 65.K9MD 50/47	22. W3KV	218954			
36.DJ30E 103/103 66.WA3ZKZ 66/42	23. K1LPS	208926			
37.DJ1TJ 103/103 67.WB5QBV 55/42	24. KØBJ	202648			
38.SM7CLZ 102/102 68.ON6HF 43/28	25. ON5WG	202400			
39.VK2SG 119/101 69.WA4JJY 45/25	26. OZ9GA	195156	-		950 57
40.W6J0X 111/101 70.WB4YSJ 33/23	27. I1HUH	194176			
41.W7MI 110/101 71.OR4PL 64/22	28. SP3CMX	189072		2. W2KHQ 530	
42.SM6AEN 107/100 72.W9VY 60/18	29. G3LDI	189070	_	3. G3GGL 526 4. Y33UO 499	
Latest entry is 15 June 1981	30. JAIMIN	186480	-		
	31. DK1BX	178266			
KONTEST KORNER	32. K4VDM	177682			
SARTG 15-16 Aug. 181 COMING	33. G4FLM	177600	-	7. W20DA 469	
GARTG 30 Aug. '81 Apr. 81	34. VE2AXO	177120		8. N3AKQ 444	
WAEDC 14-15 Nov.'81 Apr.81	35. EA3BLQ	173844		9. VK2EG 422	
GARTG 17 Oct. '81 Apr.81	36. N7DF	171962		0. OK2BFS 418 1. I5YNQ 403	_
CARTG 17-18 Oct.'81 Jul.81	37. WB3FSN	170690			
Australia-Oceania & Asia Flash coming	38. WØLHS	164340	-		
BARTG March 1982 coming	39. VO1EE	164340			
oming that on 1302	40. N9BHH	161664		4. PY2CJS 286	
m	41. I4JEE	157820		5. WB2VTD 271	
	42. IØUIÇ	153468		6. VK1GM 257	
	43. Y03AC	153468		7. W9VY 226 8. SM5AAY 207	
continued from page 5	44. WA6WGL	148674			
and will learn something technical	45. EI3CN	145200			
in the process. A secondary benefit	46. G4HYD	140448			
is that you can earn your DXCC awards	47. IØWQP	132480			
etc.	48. NØAN	128240		02. JA2VFW 102	
The main benefit is the overall im-	49. YB2BLI	126312		03. WB4BKU 97	
provement in the skill level of the	50. VK2EW	121768		04. PY2CME 80	
RTTY population, and in an emergency	51. W5HEZ	120360	_	05. JA7ML 75	
that is of overwhelming importance.	52. GW3EHN	120080		06. Y21MF/A 74	
Add to this the fun and keen edge of	53. DL8QP	115412		07. 9M2CR 71	
excitement provided by competition	54. Y79XN	110344		08. SP3CAI 37	
and that is "CONTESTING"CARTG	55. VK2SG	10344		09. W8TCO 34	
and that is "CONTESTING"CARIG	30. IN200	103230		10. KAØGYP 17	78 7

PAGE 6

mmmmmm

73's de Skip WB6CYA

YHF NEWS

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

This being the first column after Dayton, I want to say that I sure enjoyed "THE BIG ONE"..The best part for me was the "RTTY HOTEL", where I met a lot of you.

Although my XYL works as a screen printer, through my own procrastination, I was wearing a hand written "VHF Editor RTTY JOURNAL" sign. I guess it did the job anyway because many of you stopped me and we had a good many chats.

I received a nice note from John, WA9HID, in Aurora, Illinois. He informs me that VHF RTTY is alive and well there. They have a net at 145.8 simplex on Tuesday at 8 P.M. CST, WA9TRG, Frank is net control. They had 17 check-ins on their first session, how 'bout that? Thanks for the news, John.

Via 20 meters, from Bob, WAIGZX, he tells me that there are several guys on auto-start from the Scituate, Mass. area.

News for the guys in the area of Champaign-Urbana, Illinois, the 147.60/.00 machine is now going great guns. The antenna is up higher and it can be heard from many miles around.

I have heard via the "grapevine", that the Indy machine, .28/.88 will be put on a new frequency but I have not heard what that frequency will be. Come on Indianapolis, keep the JOURNAL informed.

The following is a true account of a day in the life of this writer; (bet you all have them too!)

Saturday morning and the 2 meter band is in great shape, but I have to make the weekly trip to the grocery store. My sweet little XYL proceeded to scurry through the aisles filling the basket up with goodies.

She hurried to the check-out at a good pace to minimize the time lost in shopping. When we returned home the sweet (sweetness runs in the family Hi! Hi!), daughter offered

to mow the long grass in the yard.

Now, chores done, I headed for the shack. I know the band is still up because I can still hear Joliet (70 miles away) on the HT. Okay, load the RTTY program into the computer and chase the DX on 2 meters. Maybe I can find a few of the new guys on, maybe I can even work the gang in Iowa again. SO....turn on the two meter rig What is that....? Sounds terrible.... Can't make out a word that anyone is saying, everything is distorted. Good grief, not today please..just when the band is finally open and am finished with the "chores". Oh well. get the tools out and open it up. Heck dummy, it's probably just a speaker. Hook up the external and it still sounds the same way, another idea shot. Hey, remember that loose connector on the audio patch cord. the one that you have been twisting and jiggling for months?? Get it all soldered and now, here we go for sure right? Oh well, 20 meters will be open anyway, and I haven't caught Dick or Tony for a long time.

The final clincher is that about a week later, I discovered that with the volume real low the thing works fine on RTTY. Some days it just does not pay to get out of bed. Hi..Hi..

If you guys/gals don't send in more news, enough to fill up this column, you are just going to have to put up with this dumb stuff.

73's 'til next time.

John, WA9WJG



BARTG RESULTS CONTINUED FROM PAGE 6
Check logs were gratefully received
from:F6BIQ, G3GRJ, G6JF, G8CDW, NL5288-R07, ON4BX, PAONDB, SM5EIT, SM6CQV, WA1ABL, Sim Dunnett, Page Pyne,
Y23NE, Y34YF, Y39XO and Y2 10521/0.

Multiple operator

No. Call sign	Points	T.QSL's
1. LZ1KDP	489464	296
2. LZ2KRR	465052	277
3. HÁ5KBM	403300	254
4. ISNUT	328388	197
5. HG6V	273734	216
6. OK1KPU	133952	120
7. OK3RJB	110770	130
8. SP1PBW	51192	103
9. HA6KVD	34074	47
10. SK6DG	18942	31
11. OKIKRY	6270	17
SWL Section		
1. OK1 11857	350200	224
H.Ballenberger	284068	195
3. OK3 27010	249916	224
4. Y2 5724/C	173128	137
5. K. Wustner	165240	139
6. Y2 6992/F	145452	145
7. A. Schneider	65800	68
8. Y28861/)	60080	51
9. Werner Ludwig	14460	19

During the contest. RTTY activity took place from the following countries: Antigua, Alaska, Australia, Austria, Balearic Isles, Belgium, Brazil, Bulgaria, Canada, Canal Zone. Cayman Island, Channel Isles. Chile. Czechoslovakia, Danmark, England, Finland, France, Gabon Rep., German Fed. Rep., German Dem. Rep., Ghana, Gibraltar, Guadeloupe, Guam Island, Hungary, Indonesia, Ireland, Isreal. Japan, Kuwait, Luxembourg, Malaysia, Monaco, Morocco, Netherlands Ant., New Caledonia, Newfoundland, New Hebrides New Zealand, Nigeria, N. Ireland, Norway, Okinawa, Pakistan, Panama, Phillipines, Poland, Portugal, Puerto Rico, Rhodesia, Romania, St. Pierre, Miquelon Isl., Sardinia, Scotland, Sicily, SW Africa, Lithuania, Spain, Sweden, Switzerland, USA and Yugoslavia. A grand total of 63.

73's de Ship, WB6CYA

DIGITAL ELECTRONIC SYSTEMS, INC.

1633 WISTERIA CT. ENGLEWOOD, FLA. 33533

The INFO-TECH M-77 COM-CLOCK

A microprocessor based station accessory that will, on command:

- 1. Send your call in Morse, Baudot, or ASCII.
- 2. Send date and time in Morse, Baudot, or ASCII.
- 3. Respond to sel-calls with pre-programmed message.
- 4. Give continuous readout of date and time on built-in L.E.D. display.
- Act as a beacon controller sending call, date, time, and pre-programmed message.
 - 6. Act as a programmable clock with several function outputs.
 - 7. Perform a host of other functions using the built-in 16 button keyboard.

Inputs: MIL 188, TTL, EIA, isolated loop, PTT, remote operate

Outputs: MIL 188, EIA, TTL, isolated loop FSK FSK AFSK

(2 shifts) grid and cathode keying, + 6 open collector

programmable outputs.

Available about February 1, 1981

Digital Electronic Systems

For more information write:

1633 Wisteria Court Englewood, Fl.



'We Speak Ham Radio"

Update your RTTY installation

Dialta Amateur Radio Supply

S. Dick Uhrmacher, KØVKH

212 - 48th Street Rapid City, South Dakota 57701 605-343-6127





transceivers

receivers.

amplifiers.

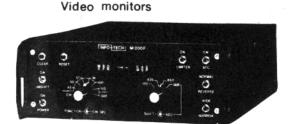
antennas



INFO-TECH M-300C

TRI-MODE KEYBOARD

Call



INFO-TECH M-200F

TRI-MODE CONVERTER

RADIO TELETYPE TRAFFIC HANDLING BY W5GHP

In our present system of traffic handling, only two modes are in general use; PHONE and CW. CW being the earliest mode used, is quite well developed, and has very strict rules in respect to message format and procedures. Phone traffic handling, while relatively new on the National Traffic System, has procedures and format. This is not so for RTTY. Apparently when RTTY enthusasists try their hand at traffic handling, anything goes. I have received messages that have no breaks, or line changes in the whole batch. Needless to say, the man who has to take these to a voice or CW net will have a very hard job. Now it must be mentioned here that all traffic handlers do develop their own method of formating their written traffic. They may write the heading line on the same line as the address etc. However, when they sent that message, the actual sending is formated in the same manner as they receive the message. In RTTY work it becomes much more important to keep the format standarized, as the receiving operator has no control of what is printed on his machine. The traffic he receives usually will have to be relayed to its destination via another mode (CW or Phone). Additionally, as an aid to the receiving operator, traffic should be bunched by region, rather than sent helter skelter. It should be arranged by area also. In this manner the receiving operator will not have to look thru 25 feet of teletype print-out paper while he is sending the traffic on a region or area net. If the receiving operator is to relay the traffic via RTTY, he will probably re-perf the sending station. In this case, it is important that he be able to break the long tape for transmission to region level RTTY stations. Therefore the transmitting operator should allow a large amount of the LTRS bet-, ween regions, and some method of designating the end of one area's traffic before the start of another. If you have ever received 200 messages without a break, you will realize how large a pile of tape will be used.

Figure #1, is an illustration of message format. Follows:

NR 13R W5GHP IB NEW ORLEANS LA 0209Z AUG 15

JOHN Bartons 835 PAN ST PENSACOLA BEACH FL 39669 TEL 329-656-8932 (figure #1)

THANK YOU FOR THE MESSAGE X WILL MEET YOU ON ARRIVAL

JIMMY

CFM 13 11 15 835 39669 329-656-8932

As can be seen from the above, any station receiving this message would have little or no trouble in retransmitting it on either CW or Voice. The main points of this format are as follows:

A. The heading is all on one line. There are very few headings that would take more than one line. If this were to happen, the second line woould be right beneath the first. This heading is straightforward, and should present no problems.

B. Between the heading line and the first line of that address, two line feeds are used (LF key). This allows the receiving operator to easily locate the parts of the message. Likewise, there are two line feeds between the end of the text and signature.

C. The text. Note that we did not break the text at ten words, but this could be done to help the receiving operator check the count. This may depend on who is making up the tapes. D. The line after the signature is the confirmation line. labled CFM. On this line all numerals in the complete message are repeated, with sufficient space between them to allow quick seperation. This will allow the receiving operator to check the numerals quickly. This confirmation line would take only a few seconds to send, and could possibly save several fills.

For easy seperation, at least 8 and possibly 10 line feeds (LF) should be used between each message. This will allow the operator to tear off each message for convenient grouping. If the whole string of messages were for one area, or one region, it would save a little paper to lower this

line feeds.

A word about machines. On some of the model 14 and 15 machines, just keying carriage return (CR) line feed (LF), and immediately keying the next letter or word, will give trouble, mainly due to the slow return of the carriage. It is possible for the machine to print the next letter in the middle of a line. The procedure to be used here is to always key a line change in a certain sequence. In the military this sequence is used, no matter what model of receiving machine is used, the carriage will always return to the left hand edge of the paper. On the newer models like the 28 or 35, where the type is on a ball, this would be unnecessary. however, the transmitting operator may not know what machine will be used, especially if the traffic is being re-prefed, and relayed to another station. Once you get into the habit of following this sequence, you will use it automatically.

spacing to 4 or 5 line feeds. The

standard rule should, however, be 8

In FIG. 2 note that the first line not only designates the region (or area) but also lists the number of book messages to be sent. After this introductory line, three or four line feeds (LF) are used, then the Heading line for all messages is sent, with the exception of the message number. There follows two Line Feeds, then the text of the message, then 2 Line Feeds and the signature. This is the same format as the previous example. After the signature we have the confirmation line CFM, just like the regular traffic. The number of line feeds used in book messages can be as short as two, or could be as long as four. In Fig. 2 two line feeds are

continued on page 10



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

> FROM THE MAILBAG



RTTY SURVEY

The response to the RTTY JOURNAL survey has been really fantastic. I hope that every RTTY Amateur will send a survey sheet in. It is not necessary to be a subscriber to the JOURNAL, so please take the time to fill one out. The JOURNAL, by this survey, is attempting to be responsive to all Amateurs interested in RTTY.

BILL S929

Senator Barry Goldwater, K7UGA has introduced Senate bill S929 on April 8,1981. This bill controls point of sale sale control of transmitting equipment, makes the term of the Amateur license 10 years. Another provision of this bill would give the FCC authority to set RFI standards for receiving equipment. Why not drop K7UGA a line and express your support.

ARTICLES

The JOURNAL needs articles on every facet of RTTY. How about a story from you YL's on RTTY? Articles on programs for W.A.C., W.A.S, DXCC, Computer log keeping, computer programs etc. Let's hear from you. Please, all photo's should be black and white.

W.A.S.

I have noticed that a lot of the gang, when sending CQ, sign with their call and state. I think that this is a great idea. I know that I really perk up when tuning the band and print a state I need. In the past we have all sat and printed a station for awhile only to find he was in Maryland and not in that elusive state of Delaware contact that you need. I have worn out a couple of Callbooks looking up calls. This practice of sending your call and state, I feel, really helps to get an RITY JOURNAL W.A.S. certificate.

ANNUAL LEAVE

My article will be shortened this month as my wife and I will soon be leaving for the Midwest for four weeks. We will be traveling by motor-home. We have several stops planned with RTTY groups and individuals along the way. One of the stops will be in Des Moines for the County Hunters Convention on July 8th thru 12th. If you are in the area look me up. I also plan on stopping by to see some of the gang in South Dakota. So long for now,

George.WA6COW

to LETTERS whenever the space bar is pressed. This means that when transmitting a string of numbers that require spaces, like the standard telephone number, the sending operator must allow for this operation. The telephone number as used on our messages is a perfect example. Normally, it would be sent like this: 504 567 4104. When sent on RTTY, there could be several added key strokes. (i.e.504 space bar FGRS 567 space bar FGRS 4104.) The simpler method would be to use a dash, which is the upper case A on the teletype

Figure #2, is an illustration of book format.

THE FOLLOWING IS A BOOK OF THREE FOR THE FIFTH REGION

R W5GHP 16 NEW ORLEANS LA SEPT 11

HAVE QSL CARDS FOR YOU X PLEASE SENS SASE TO FIFTH DISTRICT QSL BUREAU X 73

WD5XXX QSL MANAGER

NR 167
BOB JAMES W5ZZZ
2135 CENTER ST
PICAYUNE MS 37689
CFM 167 2135 37689

NR 187 BILL GULMAIC WD5000 1036 WEST DIVISION ST HOUMA LA 73245 CFM 187 1036 73245

NR 182 GLORIS SMITH WB5ZZZ RFD 1 BOX 89 JAMESVILLE TX 75643 CFM 182 1 89 75643 END OF BOOK

continued from page 9

Another point to remember, is that the older machines do not have "UN-SHIFT ON SPACE." This feature on the model 28 and later machines returns the machine from FIGURES

keyboard. Two key strokes would be saved if the telephone number was sent in this manner. 504-567-4104. In any string of seperated numbers even in the CFM line, the use of the - (dash) is recommended.

In sending ARRL MESSAGE NUMBERS, like CW, spelling out the numerals is recommended. Thus, ARL 32 would appear as ARL THIRTY TWO, and would have the usual word count of three. This will save a lot of errors and fills.

Another procedure that I think may help in RTIY traffic work, is the use of the standard RYRYRYRY line. After both stations are in contact, the sending station should send at least 2 or 3 lines of RYRYRY, to allow the receiving operator to get his equipment all set and lined up. After, say 3 lines of RY, the transmitting operator should stop and ask the receiving operator if he is ready (QRV?). The receiving operator then can answer on RTIY or CW with QRV.

continued from page # 10 or GO TRAFFIC, and the transmitting operator would then send one more line of RYRYRYRY, then send the words "TRAFFIC FOLLOWS", and start his traffic tape. In the case of a long tape, the transmitting operator must remember to stop his transmission every 10 minutes, and will send the call letters of the station he is working, as well as his own call letters on CW, then he can activate his tape again..

The above are a few ideas that I believe will assist all traffic operators who may be starting into RTTY. There are many other ideas that I am sure are as good as these, and I would like to hear from these operators. In the future we may see such advances as automatic CW to RTTY interface, with the use of the small computers now on the market. However, CW being a human effort, it may be quite a while before computers small and cheap enough will be available.W5GHP.

ARRL RECOMMENDED PRECEDENCES
Please observe the following ARRL
provisions in connection with written
message traffic. These provisons are
designed to increase the efficiency
of our service both in normal times
and in emergency.

PRECEDENCES

EMERGENCY- Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. On CW/RTTY, this designation will always be spelled out. When in doubt, do not use it.

PRIORITY- Use abbreviation P on CW/ RTTY. This classification is for a) important messages having a specific time limit. b) official messages not covered in the emergency category c) press dispatches and emergencyrelated traffic not of the utmost urgency d) notice of death or injury in a diaster area, personal or official.

WELFARE- This classification, abbreviated as W on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the diaster area or reply to such an inquiry that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry). ROUTINE- Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine (R on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic. Most traffic handled on Amateur circuits in normal times will fall into this category. NOTE--the precedence always follows

NOTE--the precedence always follows the message number. For example, a message number may be 207 R on CW and "Two Zero Seven Routine" on phone. HANDLING INSTRUCTIONS--

HXA--(followed by number) Collect landline delivery authorized by addressee within miles. (If no number, authorization is unlimited.)

HXB--(followed by number.) Cancel message if not delivered within-

hours of filing time; service originating station.

HXC-- Report date and time of delivery (TOD) to originating station. HXD--Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

HXE--Delivering station get reply from addressee, originate message back.

HXF--(followed by rumber.) Hold delivery until (date). This prosign (when used) will be inserted in the message preamble before the station of origin, thus: NR 207 R HXA50 W4MLE CK 12...(etc.). If more than one HX prosign is used, they can be combined if no numbers are to be in-serted otherwise the HX should be re-

peated, thus: NR 207 R HXAC W4MLE... (etc.). On phone, use phonetics for the letter or letters following the HX, to insure accuracy.

HXG--Delivery by mail or landline toll call not required. If toll or other expanse involved, cancel message and service originating station.

 α

DRAKE TR-7 CONTINUOUS SPECTRUM TRANS-MIT MODIFICATION B. Grokett, KR6E Ex-WAOOEQ 1127 Shirley Drive #3 Milpitas, CA 95035

The DRAKE TR-7/R-7 combination is a very high quality radio system that provides outstanding performance when used for Amateur RTTY operation. The TR-7 is normally capable of transmitting on all Amateur frequencies between 1.5 and 30 MHZ. To enable the TR-7 to transmit on one of the new Amateur bands, however, it is necessary to program that spectrum segment into the AUX-7. There are a total of eight AUX-7 channels available for auxiliary programming. However, my TR-7 uses three AUX-7 positions for reception below 1.5 MHZ. and the other five AUX-7 positions are used for fixed frequency (autostart) monitoring on 80 and 20 meters. Therefore, if it is desirable to give the TR-7 transmit capability on any of the new ham bands or non-Amateur frequencies such as MARS channels it requires eliminating some other function programmed into the AUX-7 such as reception below 1.5 MHZ. A simple solution to this problem that also adds to the operating potential of the TR-7 is to allow continous spectrum (1.5-30 MHZ.) transmit capability that is independent of any AUX-7 programming. This relieves the AUX-7 from providing transmit function on a non-Amateur frequency and allows more options for fixed channel operation which is common with Amateurs who use RTTY.

To begin the modification remove the outside cover of the TR-7. Then disconnect all plugs and the placement screw from the DR-7 and lift the DR-7 gently from its normal position.

CLASSIFIED

A D S

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

NEED MANUALS FOR Kleinschmidt TT-4C/TG such as TM11-5815-206-72 et al or civilian equivalent. Have instant cash and if you have the manuals phone collect. KA1ESH,Bill Potts, 12 Otter Rock Road, Old Lyme, CT 06371. (203) 434-9403.

NEED-NEED-NEED Technical Manual for R-390-A receiver-contact me on the air or write Edw. W. McGinley, K7BV, 4091 W. Redwing St., Tucson, AZ 85704. INFOTECH M200E TRIMODE converter \$325 M300 keyboard \$300. Both units mint and less than 2 hours use. Manuals. W8IIT, 281 Jenny Lane,Dayton,OH 45459 WANTED TO TRADE RTTY Pictures. Mainly interested in originals and pictures that have not been sent out on 20 meters. If interested send your list with originals marked will return it with my list of over 1200 to choose from. Send to Larry Clouse, NOAAU, 305 W. Benton, Windsor, MO 65360.

NOW KEEP SENDING While you CW ID. The MS-738 AFSK tone mixer is the VHF'ers answer. See November 1979 RTTY JOUR-NAL for full description. Kit \$10.95 plus \$1.25 shipping. DAYTAPRO ELECTRONICS, 3029 N. Wilshire, Arlington HTS,IL 60004. VISA/MC Accepted.

BARGAINS GALORE, teletype machines, paper & tape winders, modems, etc. STATE YOUR WANTS-must clean warehouse SASE for reply.CB Goodman, 5454 South Shore, Chicago, IL 60615.312-753-8342.

SALE! RTTY ID GENERATOR. Accepts 5 or 12 volt supplies, 31 RTTY characters available, (please include letters, figures, spaces etc.) Your preprogrammed answer-back must be supplied with order. Ex: DE YOUR CALL, NAME, CITY AND STATE. See Jan.1980 RTTY JOURNAL for complete description. Board is same size as popular ST-6 boards. Kit \$34.99 now on sale \$24.95. Board alone was \$8.50 now priced \$4.00. Please add \$1.50 for shipping. DAYTAPRO ELECTRONICS, 3029 N. Wilshire, Arlington Hts,IL 60004. VISA/MC accepted. 312-870-0555.

FREE AD WITH SUBSCRIPTION (limit 30 words)! Ham Buy, Sell, Trade, Want ads. 12 issues \$3.00. WA40SR's "Rigs & Stuff tm, Dept. RY7, Box 973, Mobile, AL 36601.

UT-4D KITS AND BOARDS. Now better than ever. Complete speed conversion with many extras, which include, transitional autostart, on-board clocks, expanded buffer and easy assembly. Board is the same size as DT-600 TU $(4\frac{1}{2} \times 6\frac{1}{2})$. See our other ad for power supply and optional crystal clock. Board kit for UT-4D \$109.95, plated thru board alone \$22.95.Please add \$1.50 for shipping. DATAPRO E-LECTRONICS, 3029 N.Wilshire, Arlington Hts,IL 60004. Phone orders welcome, VISA/MC 312-870-0555.

MODEL 28 ASR AND MODEL 28 KSR, both in excellent condition, wired for HAM use. ASR \$350, KSR \$200. Call Charlie 714-674-5467.

TELETYPE EQUIPMENT AND PARTS. Model 14, 28, 33, 35 machines. Parts for 14 thru 35. Model 28 friction feed mod kit \$38 PPD. Loop transition motor control \$10 PPD. Back into RTTY after being tied up in school. SASE for 1981 equipment list. Poul Andersen, 115 Boyken Rd, Rochester, MI 48063. 313-652-3060.

SALE: 28 ASR, Exc. \$285. 28 KSR exc. \$200. 28 Tee Dee \$80. ST-3 w/Info-Tech AFSK CWID \$90. 5" scope (Data Ins.555/N) \$40. Regency HR-312 2m. Trcvr (xtals) \$95. 12v. 10 amp H.B. P.S. exc. \$30. Local pick-up. 714-528 1856. Ed Felter, 215 Orchid Dr. Placentia, CA 92670.

HAM RADIO MAGAZINE. The no nonsense state-of-the-art technical magazine. Dozens of existing projects and an emphasis on quality unmatched by any other radio magazine. Subscribe now and see for yourself. 1 year \$16.50, 2 years \$28.50, 3 years \$38.50. Ham Radio Magazine, Greenville, NH 03043. DRAKE C LINE/FILTERS/CRYSTALS \$1000. Kenwood TR7600 \$225. Sonar 2m FM/9 pairs/P.S. \$100. Hustler 2m mobile \$15. Hygain 14 el. 2m beam \$20. 28ASR gearshift/reperf \$750. Model 26 \$30. Model 15/loop supply \$50. Motorized tape winder \$25. ST6 \$300. UT4 \$200. DT600 \$80. Diode matrix CW ID \$20. INFO-TECH M200E/300/9" monitor \$850. Hickock 665 oscilloscope \$30. 450 RTTY pictures tapes \$100. All excellent with manuals. Wanted Collins Sline. Call Dave, K3KD, 1-215-754-6286 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, Panoramstrasse 81, D-7400 Tuebingen 7, West Germany.

THOUSANDS OF COMMERCIAL RITY STATIONS are active between the Amateur shortwave 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, Panoramstrasse 81, D-7400, Tuebingen 7, West Germany. TECH. MANUALS, SUPPLIES, INFORMATION, PARTS, Rubber stamps, Badges. Teletype maintenance manuals and wiring diagrams. Facsimile supplies. Ribbons and paper for Teletype. \$1 for catalogs (refundable with order). BVE Enterprises, Box 73, Paramus, NJ 07652. RTTY CLOSEOUT- 50% off of all RTTY equipment listed on my January, 1981 list. Send SASE for six-page list and prices of Model 14, 15, 28, 33 and 35 Teletype equipment,parts and supplies. Lawrence R. Pfleger, K9WJB, 2600 S. 14th St., St. Cloud. MN 56301 Phone 612-255-9794.

continued on page 13

FOR SALE: "LIST OF NEW RADIO REGULA" TIONS 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 January 1982. The list is compiled from official ITU documents and includes also 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, Panoramstrasse 81, D-7400 Tuebingen 7. West Germany.

SELL-ST6 AND MODEL 28 ASR with TD. typing reperf, auto CR/LF, paper and tape winders, UT4. DDTMG and RTTY scope built into separate ST6 cabinet All controls built into panel on 28 ASR. Also, model 14. All excellent condition. See operating before you pick-up. Wired as complete system, sell as complete system \$800.00. ALL "REASONABLE OFFERS CONSIDERED". Dave Wipperfurth, Rt. One, Box 700, Flagstaff, AZ 86001. 602-526-0868 eves. GOOD 33KSR Teletypes \$99, just need top covers. Shipped COD for freight cost. Dave Poppke, Box 5005, Grand Forks, ND 58201.

WORLD PRESS RADIOTELETYPE Station lists. Over 50 different worldwide press services contained in 3 lists. By time, by frequencies and 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 \$6.00 plus 50¢ shipping. Universal Electronics, 1280 Aida Dr., Reynoldsburg, OH 43068.

THE RACK LINE BY DAYTAPRO, for individual or repeater these versatile uniform boards will do the job. All boards are $4\frac{1}{2} \times 6\frac{1}{2}$ inches, (same size as DT-600 board), solder plated with a 22 pin edge connector for easy servicing. All kits have edge connectors included.

CW ID SYSTEM, Interfaced for digital, FSK or AFSK keying, 10 minute timer,

variable speed (5-25 WPM), 5 or 12 volt use. Kit \$37.90, NOW ON SALE, \$27.90, board alone \$8.95.

UT-2 SPEED CONVERTOR, options include transitional autostart, on board clock, parallel buffered outputs, and FSK out Board has 2 clocks for basic speed conversion (1 speed per clock), for multi-speed use see XB-6 kit. May be used for ASCII with few modifications. Complete kit \$39.95, Board alone \$13.95.

UT-4D KITS AND BOARDS, See other ad in this issue. Kit \$109.95, Board alone \$22.95.

TU-LOOP POWER SUPPLY.If you're looking for the ideal loop supply for your TU this is it. This board has provisions for a plus and negative supply (12 or 15 volts), a 5 volt supply and a high voltage loop supply All supplies need not be mounted on the board for operation. Loop supply has on board provisions for keying transistor. All supplies have LED power status indication. Basic +12, +5, -12 volt supply \$34.99, Loop supply alone \$31.99, both supplies complete \$56.99.

DUAL XB-6 UART CLOCK, Develops 6 baud rates for each side of UART. Rock solid accuracy with use of crystals. good for both UT-2 and UT-4 systems. Kit \$29.95, Board alone \$8.95.

CRYSTAL CONTROLLED AFSK KIT. Supplies rock solid tones of 2125 for mark and 2295 or 2975 for space. Avoid drift with crystal control. Kit \$29.95, Board alone \$8.95.

MS512 SINGLE BOARD SUPPLY, Where space is at a premium this single voltage supply fits. Voltage is determined by regulator, supplies vary from 5 to 24 volts with change of regulator and transformer. All parts including transformer fit on the $2\frac{1}{4}$ x $4\frac{1}{2}$ board. Current output 700 ma to 1 amp, may be configured for negative or positive supplies. Specify – or + voltage 5,6,8,12,13.2,15,18 or 24 volt. Complete kit (5-18 volt \$13.95) (24 volt \$14.95). Board alone \$5.75.

AVAILABLE FROM DAYTAPRO ELECTRONICS, 3029 N. Wilshire Ln., Arlington Hts., IL 60004.Add \$1.25 for shipping. Use your VISA/MC for added convenience. Phone evenings 312-870-0555.

WANTED HAL DS2000 video RTTY system. Bob Bunn, WAOLKE, RT.3,Box 565 West Plaines,MO 65775. Phone 417-256-8538, Evenings. FREE AD WITH SUBSCRIPTION (25 words free, extras \$.10 each)! Ham Buy, Sell Trade, Want Ads. 12 issues \$3.00. WA40SR's Rigs & Stufftm, Dept.RY8, Box 973, Mobile, AL 36601.

S-100 RTTY connection. Our AR.01 card operates at 45.5, 50, 56, 75, and 110 Bauds using ASCII of BAUDOT code. AR.01 kit \$245, assembled and tested \$349. Contact about other S-100 products. SNOW MICRO SYSTEMS INC. POB 2201, Fairfax,VA 22031. 703-378-7257.

DRAKE TR-7 continued from page 11 Now, the AUX-7 board and the digital control board are exposed. The AUX-7 is the first plug-in board directly behind the center front of the transciever. The digital control board is a plug-in board that mounts immediately behind the AUX-7 board. Very gently pull the digital control board from its socket. Hold the digital control board component side up so that the 13 hole edge connector is in the upper right corner of view. Count down from the top of the connector to hole 11. This hole can be further identified because the collector of a transistor (Q201) mounted next to hole 11 is the only trace that pins out on 11. This trace is approximately 3/16 inch in length. With a sharp knife cut this trace so there is at least a 1/16 inch break in the conductor. This permanently leaves the tramsmit enable line high. At this point make any changes in the AUX-7 board as desired; then, reinstall all boards and the chassis of the TR-7.

This completes the modification and all functions of the AUX-7 should be normal. One additional use of the TR-7 when this modification is installed is as a high performance signal generator and with the appropriate attenuation pads installed virtually any precise signal level can be achieved.

I would like to suggest that if your TR-7 with this modification ever be sold, the unit should be restored to its' original condition, since such a versatile radio system should be used only be responsible operators KR6E, B. Grokett.....

NOTES FROM DAYTON HAMVENTION

Well the Hamvention at Dayton is now past history and John, KA6NYK and yours truly N6ELP,DEE are back home again wondering how three weeks can go by so rapidly. We had a fine time and will treasure the memories of our trip for a long time.

About thirty minutes before landing at Dayton, the fellow in the seat in front of us turned around and asked if I was Dee. Well surprise, surprise it turned out to be none other than Art Cohen of Mexico. Art is on the cover of the April JOURNAL standing between Bobby Scharfe and Arts XYL Luz. By the way Hank Scharfe informs us that both of the railroad cars purchased by Hank and Art are operational and RTTY is being installed and soon there will be a "Green Keys" QSO between the two cars. Now that is a great way of combining two hobbies.

One of these days I may be able to talk to all of you out there. As can be seen on this months cover, our shack is getting to look more and more like we want it to. The radios are: a Kenwood TS-130S with a PS-30 power supply, a Standard 2m rig and an Icon IC-2AT. The antennas are a Ringo Ranger for 2 meters and a Cushcraft A4 for 10-15 and 20 meters with an Alliance rotor. The Heath 89 is connected to a Typrinter (Olivetti) 221 printer and is what the Journal is composed on. We will be using the RTTY 89 Commsoft computer hookup as soon as our iRL TU arrives. Then we shall be off and running (hopefully).

Some of the people we talked to at Dayton were: Howard Nurse, W6LLO of Commsoft, Bill Henry of Hal Communications, Ron Guentzler former editor of the JOURNAL along with John Possehl also formally with the JOURNAL. Their calls are W8BBB and W3KV respectively. Ron informs us that former owner of the JOURNAL Dusty, W8CQ is not in good health so perhaps a card or call from friends of his would be in order.

Talked to 5NOSID, Sid May now living in Nigeria. He was with his XYL who had never been to the USA before. The weather was quite a surprise to her, it rained and was cold and windy so much so that the flea market was PAGE 14

really not the place to be (outside). Tom Harrington, W80MV of Universal E-lectronics gave us a preview of his book "World Press Services Frequencies" it is a good one, and we would recommend it to anyone interested. K8ZLO was manning the Heathkit booth and interested us in another computer program, that of "Auto-scribe" Floyd couldn't have recommended a better program for the JOURNAL. Hopefully we will be soon using it.

We were surprised to find Bob,WA9-AKT at Dayton, he lives a few miles from my son Glenn, WA6AQR/9 in northern Illinois. We did visit with both of them in their Ham shacks. Also visited with my brother George, KA9-HHU living in Melrose Park,Illinois. This is getting to be a very Hammy family.

Gordon, N9BHM, Art XEILL, ED, W3EKT Jackie WD8EGO were also there. Ralph, WA8GDT was there and we talked him into sending us an article. You will find it in next months issue. Everyone else that we talked to please forgive me, I have a very short memory. Wish I had brought our guest book with, oh well, it sure was nice.

In Philadelphia we visited Amateur radio station W3TKQ at the Franklin Institute. They sure put on a good Amateur radio demonstration. The day we were there saw all of the school children attentively watching the "show".

The last thing we did before leaving Philadelphia was something that few people can. We attended Johns' 50th High school reunion. That was a real pleasure.

Guess we had better mention that we finally had the pleasure of meeting John, WA9WJG. He moved across the river to Indiana just recently and has a new address. P.O. Box RY (how about that?) the town is Perrysville.

One of these fine days we may have a picture of John in the JOURNAL. We are not saying that he is camera shy. All I can say is that he sure can find the darkest corner of the room, He will be found at most Amateur events this summer he tells us (in the Midwest that is) so look for him.

Thanks to all the Amateurs giving us aid during our stay in Ohio, Illinois and Pennsylvania. 73's Dee...





DOVETRON



MPC-1000C

Multipath Correction In-Band Diversity & AFSK Tone Keyer Amateur Net:

Standard features include CONTINUOUSLY tuneable Mark and Space channels (1000 Hz to 3200 Hz), Dual Mode (MARK or FSK) Autostart and internal high level neutral loop keyer (20 to 60 ml). Both EIA and MIL FSK outputs are provided for direct interface to microprocessor and video terminal peripherals.



MPC-1000CR

Signal Regeneration & Speed Conversion

Amateur Net:

A front panel switch permits internal TSR-200 Signal Regenerator-Speed converter assembly to electronically "gear-shift" between 60, 67, 75 and 100 WPM. All incoming and outgoing signals are regenerated to less than 0.5% bias distortion. Also available with DIGITAL Autostart (TSR-200D): Amateur Net:



MPC-1000R/-TSR-500

Dual UART Regeneration, Speed Conversion, 200 Char. Memory, Word Correction & DIGITAL Autostart

Amateur Net:

The MPC-1000R/TSR-500 provides Preloading and Recirculation of the 200 character FIFO Memory, a keyboard-controlled Word Correction circuit, Variable Character Rate, Tee Dee Inhibit, Blank/LTRS Diddle, a Triple Tone-Pair AFSK Tone Keyer and a Character Recognition/Speed Determination DIGITAL (DAS-100) Autostart mode.

*The MPC-1000R is also available without a TSR assembly and functions as a MPC-1000C with a Triple Tone-Pair AFSK Tone Keyer. This "Rasic-R" permits future expansion with a TSR-100, TSR-200, TSR-200D or TSR-500 by simply lifting the lid and plugging in the appropriate TSR assembly: Amateur Net (Basic-R):

Your QSL will bring complete specifications, or call: 213-682-3705.



627 FREMONT AVENUE (P. O. BOX 267) SOUTH PASADENA, CA. 91030

MPC-1000R BY DOVETRON

MULTIPATH CORRECTION, IN-BAND DIVERSITY, SIGNAL REGENERATION, UP-DOWN SPEED CONVERSION, 200 CHARACTER FIFO MEMORY, KEYBOARD-CONTROLLED WORD CORRECTION & DIGITAL AUTOSTART



THE MPC-1000R REGENERATIVE RTTY TERMINAL UNIT

The DOVETRON MPC-1000R is a complete Transmit-Receive modern designed for optimum radio teleprinter communications on land, sea and in the air.

Standard features include a high level loop supply and keyer (neutral or polar), EIA and MIL FSK outputs, a phase-continuous AFSK Tone Keyer with three selectable Mark - Space - Shift tone pairs, Mark, FSK & <u>Digital Autostart</u>, Automatic Markhold, an internal RY Generator for terminal unit Self-Test and circuit adjustment, and a Signal Loss Alarm circuit.

The MPC Series is available in six different models to meet your exact requirements.

Complete specifications are available on your request, or call 213-682-3705.



627 Fremont Avenue South Pasadena, California 91030, U.S.A.

Cardiff by the Sea, CA. 92007

Hournal
SECOND CLASS FERMIT PAID
AT ENCINTAS, CA 92024