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RTTY JOURNAL & CQ MAGAZINE

ANNOUNCE RTTY DX CONTEST

see details this issue page 14

IN THIS ISSUE

RTTY JOURNAL
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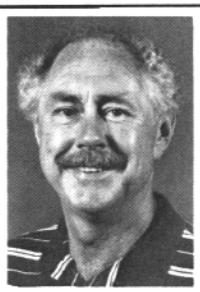


Dale Sinner, W6IWO
9085 La Casita ave.
Fountain Valley, CA.
92708

HITS & MISSES

It gives me a great deal of pleasure to announce the upcoming CQ WORLD-WIDE RTTY DX CONTEST. This contest will be co-sponsored by CQ magazine and the RTTY Journal. It will be held on the weekend of September 26 and 27 with a duration of 48 hours of which 30 hours of operation will be counted for single-op stations. This will also be an all-mode digital contest, with opportunities to make contacts on AMTOR and Packet as well as RTTY. Check the rules out, you will find them elsewhere in this issue.

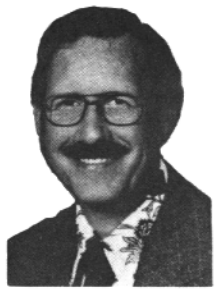
It has been my feeling for some time that we needed to develop a RTTY contest state side with the horse-power of the many other great contests we are known for. After much discussion and a lot of work by both the staff of CQ magazine and our own DX columnist Roy Gould, KT1N, I believe we now have such a contest.

To kick the contest off this year, all those who participate and submit their logs per the contest rules will receive a certificate. We hope everyone will get behind this contest this year and make a good showing. Whether you are new to RTTY or an old-timer we want you to join in and have some fun in this contest. If you are interested in DX, this will be an excellent time for you to pick up many DX stations. If conditions are good and so far the predictors are saying they will be for this weekend, there will be a real possibility, you may be able to make WAC easily and then some.

I would like your help in passing the word on the air to those you talk to and let's see if we cannot keep the frequencies really busy this weekend. As I am writing this column, the BARTG contest is about to begin and there is lots of talk on the bands about this one. So if you will help in promoting this new contest, then we can be assured of having a good turnout and a lot of fun.

CQ magazine will be promoting this contest in their upcoming issues as we will, so keep an eye out for all the late developing news regarding this fine new contest. Sample log sheets and summary sheets will probably be available soon, so watch for the details in upcoming issues.

At the present time we still could use one or two log checkers, preferably from the West coast. If you would be interested in being a log checker for this great contest, please drop me a line and let me know. I would like to know a little bit about you and if you have had any experience as a log checker before. Also, what type of equipment you have, such as, computers, printers, etc. It is a big job and a very important job that will require many hours of your time for which there is no compensation other than recognition given for your efforts. Don't let me scare you away with the picture I have painted about log checking, it's just that I don't want you think that it is a one day, one evening job. So let me know if you are interested in helping out. Hopefully, by the time the contest takes place we will have some type of software program that can help us do the job faster. (cont. pg. 4)



Dick Uhrmacher
K0VKH
212 48th St.
Rapid City,SD
57702

MSO'S

Hi Gang! Can Spring be far behind? We've certainly had a very unusual Winter up here in the western part of South Dakota, and we may have a hard time defining the transition from Winter to Spring. As I'm writing this article in the depths of January, it's 75 degrees, and I certainly wouldn't describe that as "winter weather"! MSO activity continues to increase on the National Autostart Frequency, including quite an increase in DX information from one user to another. Although band conditions seem to be gradually improving, there is quite a bit of QSB at times, making otherwise routine MSO operations difficult.

1987 DAYTON HAMVENTION

For those of you who are planning to attend the 1987 Dayton HAMVENTION, don't forget about the annual RTTY dinner. This years extravaganza is being hosted by the International Mailbox Frequency gang, and will be held on Saturday night, April 25th, at approximately 1830 hours, in the Radisson Inn Dayton, (old Imperial House North). This motel is located at the intersection of Needmore Road, and I-75, in the north-central part of Dayton, Ohio, approximately two miles east of Hara Arena, (HAMVENTION site). This relaxed and informal gathering is always lots of fun, with no admission fee, and "order off the menu" fare. However, reservations are limited to approximately fifty-five guests, so you are encouraged to register early. Reservations can be made by dropping a short note to either K0VKH or K4KOZ MSO's on the National Autostart Frequency, or by leaving a note with Jerry, WA1IUF, in his CBMS on the International Mailbox Frequency. Hope to see you there!

MSO DX HINTS

Looking for that elusive DX station? Trying to keep up with the prolifera of DX activity using digital communications these days? Want to keep up with all of the current happenings in Amateur Radio? Several of the MSO's on the national Autostart Frequency now routinely carry the A.R.R.L. DX bulletins, as well as the regular informational bulletins. Check the K5FL, WA8ICL, N1API, TG9VT and W6ZRR MSO's for this information.

And, John, TG9VT, is now carrying a recap of DX activity he encounters in his MSO. This DX information is encapsulated in a weeks activity, and should provide some very current information on where to find that rare DX station you are looking for. Also, John is currently listing a "Packet DX List' in his MSO, showing the various countries that are now active on that mode.

RTTY TRAFFIC NETS

From time to time I do receive information on RTTY traffic nets, and thought I would pass the following information along to those who are interested. It comes from Larry, KA0JRQ, from Glenwood, Iowa. He Says: "Many of the active stations on the Midwest RTTY Net, (MRN), have met and decided to merge with the Kentucky RTTY Net, (managed by Greg, KA4LSQ). The new Net name is the "Kentucky/Midwest RTTY net", (KY/MRN). The net hours will be the same, convening at 0130 hours UTC, on 3.630 Mhz, (80 Meters). Any and all properly licensed Amateur Radio Operators are welcome, and encouraged to join in. Just listen on the frequency, and call the NCS with your callsign, name and QTH; "QRU" if you have no traffic, and "QTC" (number of messages) if you have traffic. Formal traffic is handled by the Net, but having traffic to pass is not a prerequisite to checking into the Net". Thanks Larry, and both Larry and Greg maintain fine MSO's on the National Autostart Frequency, in case you'd like to contact them.

Larry also mentions a subject that I think we all need to reflect upon a bit. And, that's interference from all modes to established traffic nets. We sometimes lose track of the fact that the traffic handler not only enjoys his pursuit of handling traffic just as much as we do chasing DX, operating MSO/CBMS's or rag-chewing, but he also dedicates his time, equipment and other resources to helping others by passing traffic. These nets are relatively short in duration, and are well disciplined, and I think a bit of common courtesy is not too much to ask when you encounter a traffic net in progress. Give them a litle room guys, as they satisfy one of the most basic tenets of Amateur Radio, service to others!

MSO HINTS

With band conditions the way they are, and the increase of newcomers to the MSO systems, it's not unusual to find two MOS systems "open" at the same time, and both digitally responding to your MSO commands. **(cont. pg. 4)**

(MSO's cont. from pg. 3)

The ensuing QRM usually makes copying of either MSO a chore, to say the least. In most cases there is only one solution to this problem, and that is to shut both systems down with the ".EXIT" code. Then re-access the MSO you are interested in utilizing.

Having more than one MSO open at one time does provide some useful purpose however, and that is when a remote station wants to write the same file to several different MSO's. In this case, access the various MSO's you want to store the file in, issue the proper commands to "write" the files, and then make sure you close all of the MSO's.

NEW MSO ON 75 METERS

Scott, KL7PM, reports that he's now parking his MSO on 75 meters, on a frequency of 3.619 MHz. the access to his system is MSOPM. give Scott's system a try one of these evenings. Good luck Scott!

MSO RAMBLINGS

Russ, K1DOW, reports that henry, K4CZ, has been operating his AMTOR MSO on 160 meters, (1.8465, Mark frequency), in the evening hours. And, that Henry's signals are good copy at Russ's QTH in south-west Florida

Brownie, K5FL, Denton, Texas, (MSO5FL), has a new IBM clone computer, and is busily learning to use it. He plans on using Clark's (W9CD) IBM MSO Program with his computer, on Two Meters in the Dallas/Fort Worth Area.

Clark, W9CD, Larry, KA0JRQ, and Al, N1API, all have had experience in both MSO's and Packet Radio. If you need information on "how to", with respect to these modes, give these gents a shot at your questions.

That's it for this month Gang. Think "Spring", and drop me a line if you have something you'd like to see here in the MSO Column.
Best 73 de Dick, K0VKH

(HITS & MISSES cont. from pg.)

The Dayton Hamvention is almost here and I hope you have made plans to attend this premier Amateur Radio event of the year. I'm hoping to meet many of you there this year and you will find me hanging out at the different exhibitors booths who sell and advertise digital equipment through the pages of the RTTY Journal. I'll also be hosting the "Digital Digest" session on Saturday from 1300 to 1445 hours and I invite you to attend this program. We have a fine program lined up for you. If I don't see you somewhere around on Saturday then maybe I'll see you Saturday night at the RTTY dinner at the Radisson Inn (details in Dick's MSO column). **(cont. next column)**

RTTY BANDPASS

CALL	FREQ	TIME	DATE	
TA1D	14.080	1200	01 MAR	
TA1F	14.090	1200	01 MAR	
KC6CS	14.088	2350	28 FEB	
CN8CC	14.096	1130	28 FEB	
	14.090	1650	18 FEB	
A61XL	14.086	1200	27 FEB	
	14.089	1230	18 FEB	
OX3HX	14.082	1400	26 FEB	
AP2KS	14.093	1130	25 FEB	
YB2BLI	14.083	1200	24 FEB	
YB2NOF	14.085	1145	24 FEB	
VU2IJ	14.083	1345	22 FEB	
FY7AN	14.085	1100	22 FEB	
GU0FYR	14.087	1150	22 FEB	
J73EH	14.081	1450	21 FEB	
VK9YS	14.083	1441	21 FEB	
JW5E	14.087	1400	18 FEB	
SV5TS	14.091	2000	17 FEB	
4X6RA	14.089	1400	13 FEB	
4X6KF	14.088	1405	13 FEB	
HV2VO	14.086	1500	13 FEB	
OY4HQ	14.083	1905	13 FEB	
LX2CP	14.082	1310	13 FEB	
V85DU	14.096	1300	13 FEB	
A4AJW	14.074	1145	11 FEB	ARQ
V31AB	14.087	0001	10 FEB	
J88BN	14.080	2000	10 FEB	
TL8CK	14.090	2105	10 FEB	
OD5PL	14.087	1825	09 FEB	
CO2BB	14.089	1630	09 FEB	
PY4BK	14.092	1225	09 FEB	
5B4BN	14.092	1210	09 FEB	
CO2JE	14.081	1715	08 FEB	
WP4C	21.087	1330	08 FEB	
KX6OI	14.088	2230	08 FEB	
ZF1RC	14.084	1750	07 FEB	
FP5HL	14.085	1730	07 FEB	
5L2X	14.074	0001	06 FEB	
C6AAA	14.086	1145	06 FEB	
DF9SA/4S7	14.086	1225	04 FEB	
9Y4BR	14.089	2140	03 FEB	
KE4FE/KH2	14.092	0005	02 FEB	
HR1BY	14.085	2345	01 FEB	
CX7BY	14.082	2330	01 FEB	
CO2FRC	14.092	1520	01 FEB	
OX3FG	14.092	1350	01 FEB	
YS1GMV	14.089	1600	01 FEB	

(HITS & MISSES cont. from previous column)

Well, it looks like I'm out of space again this month, so some of things I'd planned to write about will have to wait for another issue.

de Dale, W6IWO

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- CRT Tuning Indicator
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- 8, 600, or 10K Audio Input
- Signal Regeneration
- Variable Threshold Diversity
- RS-232 Remote Control I/O
- 100-130/200-250 VAC, 44-440 Hz
- AM or FM Signal Processing
- 32 steps of M/S filter BW
- Mark or Space-Only Detection
- Digital Multipath Correction
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Roy Gould, KT1N
P O BOX DX
Stow, MA. 01775

DX - NEWS

Well here it is March already and I now have been writing this column for a year. Time does fly, it doesn't seem like a year. I am surprised I did not get a few letters regarding my mistake in last months column. The mistake being that the 3Y1EE was on February 1, 0100 UTC not January as I stated. How embarrassing after I wrote all the Do's and Dont's about the correct time and date on QSL procedure.. Lots of good info this month so lets get at it.

3Y1EE... I received a letter from W2JGR, Jules. He was one of the ones to work the 3Y on RTTY. He states that he just happened to be there but in a QSO later in the week with Gin, JA1ACB, he asked about the 3Y activity and Gin told him that he (Gin) had shipped TONO gear to New Zealand for the Expedition, but had no promise of when they would be on but they would try. As the expedition was nearing an end and still no RTTY he sent cables and calls to the 3Y QSL Manager in Norway asking that they please put the RTTY gear to use. As a result they came on the next day for that 1-1/2 hour period. I think it was great that Gin did supply gear for the expedition and a few of the gang were able to work it. My point is that I was not aware that they had RTTY gear. It would have been good info to have as when working them on CW or SSB one could ask about RTTY operation. Now I am not trying to say that I should be made aware of all such activities because I am a RTTY DXer but I see myself as a collector of RTTY DX info from all of you, and through these pages or on the air contacts share that info with all of you. So Gin, thanks for getting them on RTTY and let us know where else you may be sending gear to put those new ones on the bands.

Cocos Keeling and Christmas Islands ... Jim, VK9NS was active on Cocos and was worked by some of the gang. He then went to Christmas and as of this writing has not been heard by yours truly but has been worked by some. QSLs go to VK9NS.

Republic of Belau ... Saty, JE1JKL, has been on as KC6CS, if you were lucky enough to get him, QSL to him direct (JE1JKL).

San Andres ... HK0HEU, has received RTTY gear and should be heard soon.

St. Vincent ... J88TN, J88AR and J88BH should also be active as you read this.

St .Lucia ... J6LGH and his XYL J6LQW are also active on the keys.

Anguilla ... Word has it that VP2EZ plans to try his hand or should I say hands, at RTTY soon, watch for him.

Caribbean ... The planned DXpedition to the Caribbean by WA4WIP and KP2N is scheduled to start on or about June 1.

Marshall Island ... KX6OI continues to be active and has been heard around 2200 UTC.

Trinidad and Tobago ... 9Y4PK has been active also, usually around 14.088.

India ... Both VU2IJ and VU2DLZ are active. Look around 1100 to 1200 UTC. VU2IJ also reports that he will answer all QSL cards he receives direct and is good in the Callbook. He also says he will get answers to VU2DLZ.

Antartica ... KD7P/KC4 has also been heard on RTTY.

Macau ... The boys from VK land report also that XX9AX is active on RTTY.

St. Pierre and Migueleon ... FP5HL is on also but no set operating times. He comes and go's. He asks for QSL's direct and word is he is hard to get a card from.

Chatham Islands ... ZL7DE has had some antenna problems but is now back on the keys.

Nigeria ... 5N8ALH has also been worked and is active.

Kenya ... 5Z4TA has been worked on AMTOR (ARQ) at 1200 UTC on 14.075 and also later.

Wake Island ... AH9AC will be QRT until early April, when he will return to Wake. At present he is in Sydney. **(cont. next pg.)**

(cont. from pg. 6)

Saipan ... NV7L who is /DU9 reports that he will be on Saipan (KH0) until early April. he says for Stateside the best times will be between 2200 -0100 UTC on 14.073.5 or 14.077.25 FEC/ARQ on Fridays and Saturdays UTC. At other times he will be on 14.105 Packet.

United Arab Emirates ... Magid, A6IXL continues to give out RTTY QSOs on 20 Meters. As of now he does not count for DXCC. Several of us have asked him for documentation that we can forward to the DXCC desk. Milos, OK1JKM and Ross, I8AA are working on this also. Lets hope he counts!! By the way, the RAK he gives in his QSL address, RAK Box 341, U.A.E., stands for RASAL KHAIMAH, which is one of the Emirates.

Johnston Island ... KL7LF/KH3 has been trying valiantly to get on the Digital Modes, but has been visited by "Mr. Murphy". His latest visit resulted in a bad TU that has to be returned to the factory for repair. As a result, he will not be active until some time in April.

Hong Knog ... VS6UP is none other than Brett, KN7G, who many of you with AEA gear may remember when phoning in questions to the "Applications Desk" at AEA.

Togo ... 5V7JS is now QRT from Togo and no new known destination for him.

Tonga ... A35PP has been reported on also, only one sighting and that was from VK land at 0900 UTC..

Gabon ... Jean TR8GLD, has also been banging away at the keys and asks for QSLs via direct. jean Louis Domange, BOX R. I. R., Liberville GABON, West Africa.

Pakistan ... AP2KS has been heard between 1100 -1200 UTC and asks for QSLs via the CBA with 3 IRCs.

Kenya ... 5Z4TA gives out Kenya QSOs and asks for cards via BOX 30107, Nairobi, Kenya.

Galapagos Islands ... As you read this you will know doubt have already found out that the March trip to the islands by Ted, HC5KA and others was canceled. They now plan to go again in May.

Sakhalin Island UA0 ... UZ0FWI has been reported on at 0240 UTC. Tim WB6WQA worked him on February 9. Tim reports that he drifts a bit (the UZ0 that is) so keep the RIT 'ON'. You're right Tim, I worked him 28 Feb at 0100 and he does drift.

Iceland ... TF3LB has also been reported on, he is new to RTTY and also drifts down in frequency. Look for him about 1200 to 1300 UTC.

AMTOR ... Tom, VE7VP shares with us the following stations he has worked on AMTOR. Tom has 62 countries worked on this mode, very impressive. Here are some of them: GI4LKG, GI4WRI, KP4ANG, LA3FE, ZS6BYG, JW5E, HI8GN, EA3BFR, ZS3NH, 5H3ZO,, ZF1RC. All within the last month.

BARTG RTTY Contest ... Well I hope everyone did well in this one, as I write this column, I haven't decided whether to participate as a single op or invite some of the locals in for a big Multi-Op effort. But I will be there. Hope you had fun in it also.

Speaking of Contests ... Elsewhere in this issue you will see the announcement of the First CQ Worldwide RTTY DX Contest, Co-sponsored by the RTTY Journal. This also should be a great contest. Dale and I and the gang at CQ have been working on this for over a year. I also will serve as Contest Director for this one.

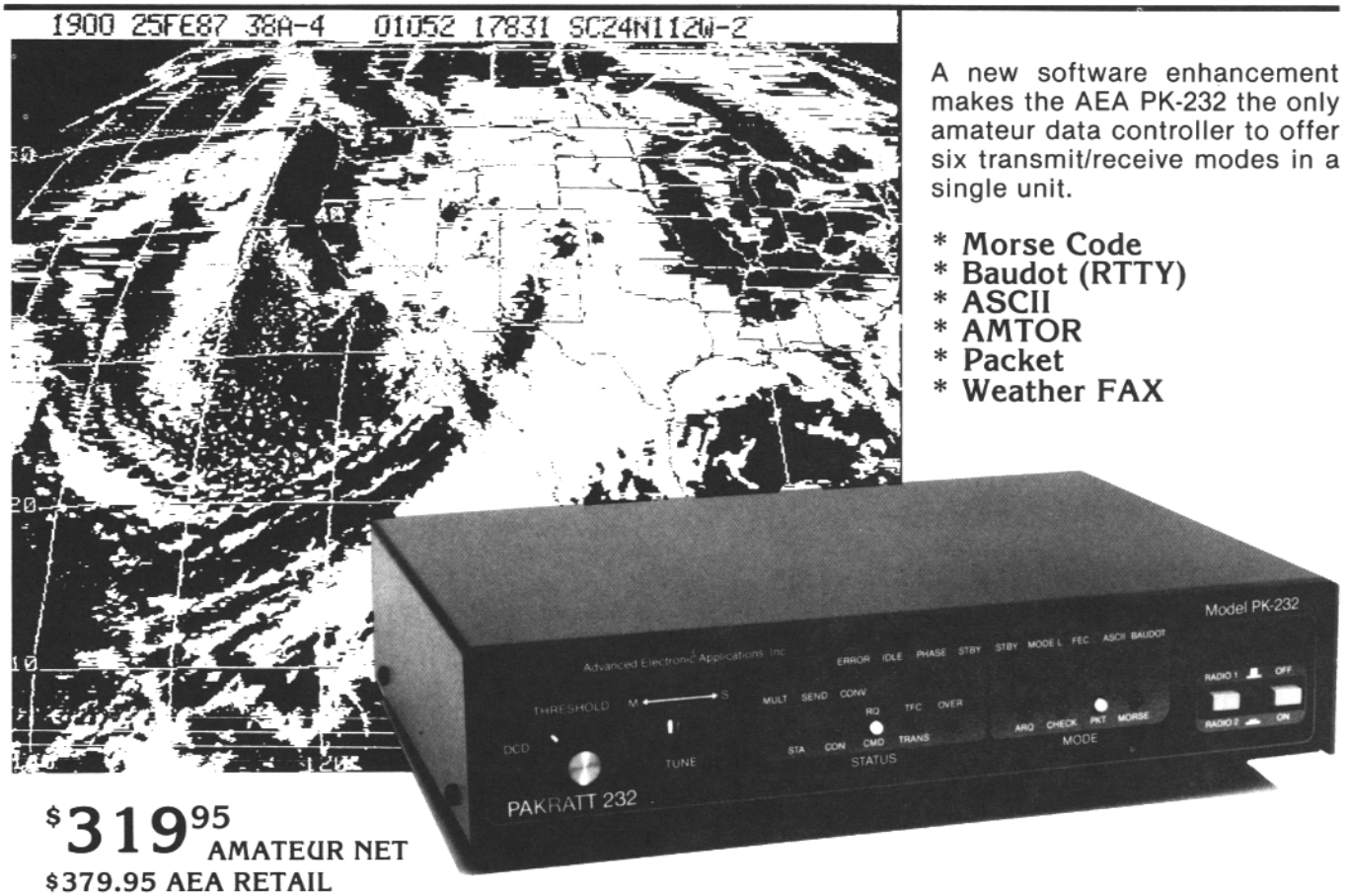
Also received a note from Carl, K6WZ. Carl gave me some tips on cleaning up my TVI problem. He is moving from the sunny West coast to Kansas, so he will be off the air for a while. He will miss the BARTG contest he thinks for the first time in many years. We will miss you in there also Carl, maybe he will throw a wire up and get on anyway? Until he gets settled you can drop Carl a line at 507 SW 4th St., Abilene,KS.

That is it for this month, look over the RTTY BANDPASS and work a new one. Your letters are always welcomed and photos are really appreciated. So please drop me a note with your comments and suggestions. Share your info with one of the deserving, a fellow RTTY DXer. See you in Dayton and tell a friend about the RTTY Journal. Remember, this is your column.

Good DX, and a Tip of DX Hat to, W1DA, TG9VT, W2JGR, K6WZ, VE7VP, W0LHS, WB6WQA, VK2SG, and the VK2AGE mailbox, OK1JKN, I8AA, WA4WIP, the ARRL DX bulletin and the DX Bulletin. **de Roy, KT1N**

New PK-232 Breakthrough

Six Digital Modes - Including Weather FAX



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The PK-232 also includes a no compromise VHF/HF/CW modem with an eight pole bandpass filter, four pole discriminator, and 5 pole post detection low pass filter. Experienced HF Packeteers are reporting the PK-232 to have the best Packet modem available.

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PACKET

In this month's article I would like to do a review of an interesting Packet Radio program, one that I find well suited for ease of operation and very functional. Also the beginners column continues with some basic parameter settings for your new TNC, and a look at the unproto mode. The glossary I was hoping to put in this month's issue has been moved back a month as it does take up a lot of room and I wanted to get it all in one issue. So be looking for it in next months.

YAPP (Yet Another Packet Program), written by Jeff Jacobsen, WA7MBL, was originally developed to provide a terminal program for use in testing the WA7MBL BBS code. You might recognize Jeff's call in association with the popular BBS program (The other major PBBS software program developed by W0RLI). To help provide funds for a continuing development program for the WA7MBL BBS code, the terminal program YAPP was distributed to the Packet community. It is obtainable by either sending for the program from the authorized distributor (see note 1), or copying from someone who has it. Jeff asks a contribution of $20.00 be sent if you find the program to be of value. If not, he still encourages your copying and distributing to those who might find value in it as long as it is used for private, noncommercial use.

The program has been tested on the IBM PC, XT, AT, and a few compatibles. It is easily copied onto one diskette and requires only one drive for operation. Another version of the program (YAPP2) uses an external I/O driver for those using MS-DOS computers with nonstandard IBM communication port locations.

Some of the operating features the program offers are: split or normal screen operation, save text to disk, printer toggle, send or receive binary file, and send text file. Some special operating aids include a scroll buffer. Any text that scrolls off the screen is saved to this buffer for call back to the screen or the buffer can be written to disk. This is very helpful if you need a repeat of some information that whizzed off the top of the screen at 1200 baud. Another good feature is the DOS gateway. This allows you to exit to DOS, carry out mundane DOS tasks, (even run other programs) and at the DOS prompt type 'exit' and immediately find yourself back in the terminal program. This feature works even while connected to another station without disturbing the connect status. Nice to have something like this when the person you are connected to wants a file and you cannot remember the filename, or just as a quick way to check and see what is happening on the frequency while working elsewhere on the computer. One final feature that is worth noting is the Connect Directory. By simply creating a text file called YAPP.DIR you can connect with any station you decide to include in that file. For example, the text file will look something like this:

Dale W6IWO v N6JFT-1
Rich N6NKO

When in the program depressing ALT-C will bring up a window with a message asking who to connect to. If you wanted to connect to W6IWO you would simply type in 'Dale' and press return. The TNC is then given the connect sequence specified in the YAPP.DIR file.

The documentation provided on the disk is very brief, but adequate to use the program effectively. The ease of operation is realized the first time the program is booted up. The help menu and various prompts appear in windows in the foreground and disappear immediately on a given command or by pressing the ESC key.

It is well worth the twenty bucks Jeff is asking for. Especially since that money received from users is directed to the WA7MBL BBS software code which is distributed free to the BBS SYSOP's. If you are a BBS user, you probably are well aware of all the work that WA7MBL and W0RLI have put into their programs.

THE BEGINNERS COLUMN

When first learning how to use your newly acquired TNC, one should remember that even though the unit itself is a highly sophisticated piece of equipment, that a lot of time was spent by developers to make the operational aspect of the TNC simple. The very basic element of connecting to another station is no more difficult **(cont. pg. 10)**

(Packet cont. from pg. 9)
than typing in the station you wish to call and press the return key. However there are a few basic settings the TNC needs to know so it (and you) will fit into the local area network (LAN). Note: these settings are for use with 2 meter FM and should not be applied to HF operation. This is also a generic description but should do well for most TNC's:

FROM THE COMMAND MODE

TXD (TX DELAY WILL BE 400 MIL/SEC)
BE O (TURNS BEACON OFF)
RES 0 (RESPONSE TIME, NOT ON TNC1)
P 256 (LENGTH OF PACKET. THIS IS A MAXIMUM BUT CAN BE LESS)

Now these settings are only a suggestion and, contingent on your local area network, can be changed. You may want to inquire about the exact settings with another packet operator in the area or the local BBS might have the information. For in depth explanations of your TNC settings, refer to the TNC manual (if it is a good one, it should have some kind of explanation). In the TNC 2 and clones the default settings are usually the best to stick with. However, a lot of these commands are for your covenience and once you get familiar with your TNC you will find yourself changing these commands to suit your operating style.

The 'unproto' mode is probably one of the least used features in Packet Radio operations. However, it can be an effective tool used in many different ways. Unproto, is simply sending out packets without being connected to anyone. Before attempting to do this, lets look at a TNC command designed to customize this mode. In the COMMAND MODE type in 'UNPROTO' and hit return. The TNC will reply with 'UNPROTO CQ'. CQ is the default 'unproto' message that will be sent out in an "unproto heading". Without being connected to anyone go into the CONVERSE mode (CONV at the CMD. prompt). If you were using the call W6OXP and hit return your TNC will transmit the following packet:

W6OXP> CQ:

Now we can change that to add your name to all 'unproto' packets sent from your station. Once again enter the COMMAND mode and type UNPROTO followed by a space and then enter your name. Once return is pressed in the CONV mode, your name will appear in place of the CQ. You do not need to enter your call in the unproto message as the TNC has this information when you set up the MYCALL command. So what good is the 'unproto' mode? Well, if several packet ops wish to have a round table real-time QSO, this can be done in the 'unproto' mode. By turning the MONITOR function to 'ON', you will see all the packet activity on the air if connected or not. To transmit what you type in 'unproto', simply type in whatever you want to say in the CONV mode and hit return. On every ones screen it will look like this:

W6OXP> COLE: IS ANYONE AROUND FOR A SHORT QSO THIS EVENING?

Assuming that there are people who leave the MONITOR ON, they will see your print. Another ability of 'unproto' is that you can use a digipeater to re-transmit your 'unproto' message. Once again in the COMMAND mode type in "UNPROTO COLE VIA WB6LGL, W6IWO". Now your unproto packets will be digipeated thru WB6LGL then W6IWO. Your message asking for a QSO will be carried with the packet. This is a good way to extend the range of your 'plea'. Also the round table, if sent thru a digipeater, can access a larger area. You might consider keeping the 'unproto' conversations on a frequency set aside for keyboard contacts. Coexistence with BBS spitting out 256 characters at a time during a file transfer can make reading the mail intended for you an almost impossible venture.

That is about all I have in this months issue. My home BBS is NK6K-2 so forward me a message and I will be glad to either answer it via the network or in the Journal. Would also like to hear from those of you wishing to submit material for articles on Packet. So get connected, have fun and see you next month!
73 de Danny, N6IHQ

ELMER

Frank Richards, N0DAA needs help marrying a Tono 777 and Tono 7000E to any Packet device. Write to him at: Rte 5 Box 424A, Carthage, MI. 64836.

Attention IRL owners. Since IRL is no longer in business you may be wondering where you can get service on these units. Write or call: Jon Severt, WB8YJF, 4523 Kenfield Rd #A, Columbus, OH., 43224, (614) 263-4937.

Dan Testa, 390 Lincoln Ave., Newark, NJ., 07104 needs help hooking a Vic-20 to a HP #9866A thermal printer. Needs manual and schematics. Wants to use this nice table top unit for hard copy.

I N T R O D U C I N G

KPC-4 DUAL PORT

KPC-4 Gives Simultaneous Connects, Digipeating, and Gateway On Two VHF Radio Ports

KPC-4™ is your GATEWAY into VHF Packet flexibility. KPC-4 features **two fully functional packet ports**, digipeating on each port, VHF gateway between ports, and an RS-232 computer port.

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Garden Grove, CA. 92640

CONNECTIONS

I see that I will have to create a paragraph heading called "MisConnections" as I found some omissions in the February column. Misconnection #1 is in the middle of the second paragraph on page 9, in the sixth sentence beginning "ACK is only sent if the printer is busy, ... ", there should be a "not" just before "busy". Misconnection #2 is in the first sentence of the third paragraph on page 9, where the word "port" should follow "serial". Sorry about that!!

THERE IS MAIL

Two letters were received in response to the January column. John, K4VDM has a problem with connecting the RS232 output of his Infotech 200F to a printer. The 200F has a maximum output speed of 300 baud and his printer will only go to 600 baud on the low end of its speed range. However, John does have a serial to parallel converter with internal 8K buffer available. Inasmuch as his printer has both serial and parallel inputs, the output of the converter should drive the printer without problems. Because the converter has serial input rates that will match the 300 baud output of the Infotech, this arrangemnet should work out ok. He does, however, still have a handshaking problem that remains to be solved. Tune in next month for the exciting solution! (we hope). By the way, when I answered John's first letter, (he thoughtfully provided a SASE), I included my QSL card which notes my previous call signs (all ten of them) and John thought K5OLU looked familiar. Sure enough, he found a 1966 QSL from K5OLU El Paso, Texas! Always nice to renew old friendships.

The second letter was from Phil, W3GMK who commented on the confusion caused by variations in interfacing by different vendors. And, the problems in the portability of software being used with the associated equipment. He made some good points about the need for a common programming language such as BASIC. I agree that so far as we do not exceed 300 to 1200 baud, BASIC will serve the purpose. However, as throughput requirements increase, interpreted BASIC will become to slow. This will be especially true when the computer is required to perform additional tasks other than just input/output. Compiled BASIC will be faster, but the time comes when even assembler programming just barely makes the grade without increasing clock rates. Moreover, programmers are an independent lot, who care more for elegance and tightly packed code than they do for software portability. Now that statement ought to generate a few letters - nothing like creating controversy to drum up interest! So don't hold your breath whilst waiting for the "universal software language". Nevertheless, Phil describes a problem that is probably a major stumbling block, especially in an era of almost overnight obsolescence of microprocessors, computers, and communications equipment. To Phil, thank you very much for taking time to write. Comments, Anyone?

ONE MORE THING

If any of you out there would like to see discussions or analysis of a specific subject or hardware item, please write and let me know what you desire. I will not publish your name and call sign without your permission, so you can take refuge in the cloak of anonymity if you choose. Remember that the only foolish questions are those which are not asked. If I cannot answer a question, someone out there may have already solved the same problem. At the very least you should get some sympathy!

REVIEW OF USERS MANUALS
PACKET RADIO MANUALS

Most vendors who build the licensed version of the TAPR (Tucson Amateur Packet Radio) TNC use the TAPR documentation almost verbatim in thier own manual. This is especially true in the chapters covering TNC commands and the theory of operation. However, each manufacturer has their own installation and setup description. I thought it would be interesting to review some of the manuals and try to critque the instructions for Terminal/Computer connection to the TNC and the TNC to Radio connection.

The first manual reviewed was the MFJ TNC manual. Overall, I found the installation instructions in Chapter 2 to be orderly, clear, and well written. The RS232C port connections were well done. The only adverse comments are really nit pickers - I would have liked to see either a clear photo or a detailed drawing of the rear panel of the MFJ TNC. Also, when they described the TTL connections, there should have been a forward reference to Chapter 7, page 9 which describes what a TTL signal is in terms of voltage levels.

In some MFJ TNC manuals, a correction sheet

(cont, next pg.)

(cont. from pg. 12)
was included to correct the pin/wire color codes for the included interconnect cable. However, it appears that this was not done for all manuals. Both Dale, W6IWO and Danny, N6IHQ use the MFJ TNC. Dale's manual had the correction sheet. Danny's manual did not so he had a bit of problem until he discovered the discrepency. Neither Dale nor Danny had any other problems during the installation of thier TNC's.

If you have a problem with a manual, be sure to write the vendor describing the problem in detail. While the vendor may not acknowledge your letter, he does appreciate the information. With this information the vendor can make corrections to later editions and/or issue correction or clarification sheets in current manuals. We all need feedback from the user/reader for the product improvement and quality control.

Now I suppose that some of you are getting tired of reading about Packet Radio, so next month I will review something a bit more traditional, perhaps the installation of the AEA CP-100 interface. If you want something in particular, let me know. The publication schedule is such that I have about two weeks after the latest issue is in the mail before I must have the copy for the next column in Ye Hon. Ed's capable hands. Very 73, de Cole, W6OXP

(WORLDWIDE RTTY CONTEST continued)

AWARDS

Plaques will be awarded to the first - place finishers in each of the operator classes. Certificates will be awarded to second and third place. Certificates will be awarded to the first-place finishers in each of the U.S. and VE call areas. Certificates will be awarded to the first-place finishers in each DX country. All inaugural contest entrants will receive a certificate.

LOGS and ENTRY FORMS

Standard CQ contest log and summary forms should be used. Sample log forms and summary sheets are available from CQ. Please include an SASE or appropriate postage (stamps or IRC's)

DEADLINE

All entries must be post-marked NO LATER than December 1, 1987. An extension may be given if requested. Logs should be mailed to CQ RTTY CONTEST, 76 N. Broadway, Hicksville, NY. 11801 - USA

16th GARTG-RTTY-CONTEST 1987

General: The German Amateur Radio Teleprinter Group (GARTG) is sponsoring their 16th GARTG Short Contest and welcomes participants of all RTTY Amateurs in and outside the Federal Republic of Germany.
There will be a shortwave and VHF Contest. Both contests will be scored separately. The contest is split into 4 single contests within a year and each classification is stated.

SHORTWAVE:

1st Part: Sat. Feb 14, 1987	1300 - 1700 UTC
2nd Part: Sun. Apr 11, 1987	0700 - 1100 UTC
3rd Part: Sun Aug 30, 1987	0700 - 1100 UTC
4th Part: Sat Oct 31, 1987	1300 - 1700 UTC

VHF:

1st Part: Sun Feb 15, 1987	0800 - 1200 UTC
2nd Part: Sat Apr 11, 1987	1200 - 1600 UTC
3rd Part: Sat Aug 29, 1987	1200 - 1600 UTC
4th Part: Sun Nov 01, 1987	0800 - 1200 UTC

BANDS:
80 and 40 meters
VHF: 2 meters 70 and 23 cm

CONTEST CALL:
CQ GARTG contest. After each QSO the station having called last keeps the frequency while the previous holder QSYs.

EXCHANGE:
HF - RST, QSO number, name, QTH
VHF - Same as HF plus QTH locator

SCORING:
Each station may be worked once per band. Each complete QSO counts 1 point on 80 and 40 meters. On VHF each complete QSO on 2 meters is 1 point, 70 cm 2 points, and 23 cm 3 points worked. Contacts via repeaters are not valid. Final score is total of all QSO points.

CLASSIFICATIONS:
Class A: HF stations with more than 200 W input
Class B: HF stations with up to 200 W input
Class C: SWL stations
Class D: VHF stations

LOGS:
Logs to contain:
a) Call, name and complete address; b) Classification; c) Time in UTC, Call, name, QTH station worked, transmitted and received message numbers, band used; d) Final score (logs without final score will count as checklogs)
VHF: a) to d) same as above, e) QTH locator sent and received.
SWL: For points and scoring confirm above. The same stations may be reported only two times. Instead of message received, the SWL should report call of partner-station (worked).

RESULTS:
The results will be published in the GARTG newsbulletin (RTTY-News) and in other bulletins around the world.

MAILING:
Logs must be received not later than 20 days after closing of each single contest.

CONTEST MGR:
Wolfgang Punjer, DL8VX, P.O. BOX 90 11 30, D-2100 Hamburg 90, Fed Rep of Germany

THE FIRST ANNUAL CQ MAGAZINE - RTTY JOURNAL

WORLD - WIDE RTTY DX CONTEST

OBJECTIVE

For amateurs around the world to contact other amateurs is as many CQ zones and countries as possible using the digital modes.

CONTEST PERIOD

0000 UTC September 26, 1987 to 2400 UTC September 27, 1987. The total period is 48 hours, but no more than 30 hours of operation are permitted for single operator stations. The 18 hours of OFF time can be taken any time during the contest period, but OFF periods may NOT be less then 3 hours. All ON and OFF periods must be clearly noted in the log and summary sheets.
Note 1. Multi-Operator stations may operate the full 48 hours.
Note 2. A Single Operator MAY operate more than 30 hours, but only the FIRST 30 hours of operating will count toward the official score.

OPERATOR CLASS

A: Single Operator, B: Multi- Operator, Single Transmitter (ALL BAND ENTRY ONLY)

ENTRY CATEGORIES

A: All Band B: Single Band

MODES

Contacts can be made using Baudot, AMTOR, (FEC/ARQ), ASCII, and AX.25 (No digipeating QSO's allowed)

BANDS

160, 80, 40 20, 15, and 10 meters

VALID CONTACTS

A given station may be contacted only ONCE regardless of the digital mode employed. Additional contacts are allowed with the same station on each of the other bands as well.

EXCHANGE

Stations within the 48 Continental United States and the 13 Canadian areas must transmit RST, State, or VE area and CQ zone number. All other stations must transmit RST and CQ zone number.

COUNTRIES

The ARRL and WAE DX Country lists will be used.

QSO POINTS

One (1) QSO point for contacts within your own country. Two (2) QSO points for contacts outside your own country but within your own continent. Three (3) points for contacts outside your own continent.

MULTIPLIER POINTS

One (1) multiplier point for each U.S. state (48) and Canadian area (13) contact on each band. One (1) multiplier point for each DX country in the ARRL DXCC and WAE lists. NOTE that KL7 and KH6 are country multipliers ONLY, and not state multipliers. One (1) multiplier point for each CQ zone worked on each band. A maximum of 40 per band.
NOTE: Canadian areas are VO1, VO2, VE1 N.B., VE1 N.S., VE1 P.E., VE2, VE3, VE4, VE5, VE6, VE7, VE8 N.W.T., VY Yukon.

FINAL SCORE

Total QSO points times the total multipliers equals the total claimed score.

CONTEST ENTRIES

All entries must include a SEPARATE log for EACH BAND, a DUPE sheet for EACH BAND, a MULTIPLIER check list for EACH BAND, and an OVERALL summary sheet. All logs MUST show date, time, callsign of the station worked, RST exchanged, State, or Canadian area (where applicable), CQ zone, and points claimed per contact.
Note: Standard CQ World-Wide DX Contest sheets are appropriate for use in this contest.

DISQUALIFICATIONS

Operating in an unsportsmanshiplike manner, manipulating scores or times to achieve a score advantage, or failure to omit duplicate contacts which would reduce the overall score more than 2% are grounds for disqualification. Decisions of the Contest Committee are final.

AWARDS

(Contest continued on page 13)

CLASSIFIED ADS

30 words $3.00, additional words 5 cents each. Cash with copy.
Deadline for copy is 1st of month for following month

FOR SALE: Real-Time HF WEFAX Maps on a dot matrix printer. Available for Commodore, IBM, Apple, Atari, and CoCo. See March 86 QST magazine for circuit details. Kit $28.15, Assembled $39.95 - Software for Apple, Atari, and Commodore $10.00, IBM $15.00 plus $2.50 shipping. For Info, large SASE to: A & A Engineering, 2521 W. La Palma #K, Anaheim, CA. 92801, (714) 952-2114

FOR SALE: HAL ST-8000, used only few hours. Mint condition $2250.00. W8WYK (216) 662-0731

HENRY RADIO, RTTY Headquarters for all your needs in the world of digital communications, is overstocked with used equipment. We have HAL 3100's, MPT/MSO's, Demodulators, and the latest new pieces in stock. ST-8000, DS-3200 computers, multiplexers, etc. We also have some used Robot RTTY and Slow Scan TV units. Complete line of Advanced Electronic Applications (AEA), used CP-1, PK-64, and the newest PK-232 all band, all mode all computer system. Also UDC-232 (use your own demodulator or TU). Call HENRY RADIO at (213) 820-1234 in Los Angeles, or 1-800 421-6631 outside California. Ask for George, AB6A.

NEWS - NEWS - NEWS - Amateur Radio's Newpaper "WORLDRADIO". One year subscription is $11.00. Contact: WORLDRADIO P.O. BOX 271309, Escondido, CA. 92027-0770

FOR SALE: Dovetron MPC-1000R. Mint, in original box, first $550.00 gets it. TYPETRONICS, BOX 8873, Ft. Lauderdale, FL. 33310. Buying unused Teletype repair parts, M-28 and later. Send SASE for list of teletypewriter gears, paper, etc.

RTTY FREQUENCY LISTS AND BOOKS: We have a complete selection of worldwide RTTY frequency books and lists. Press, weather, government, clandestine etc. Write for free catalog. Universal Electronics, Inc. - 4555 Groves Road, Suite 13 - Columbus, OH. 43232 (614) 866-4605

FOR SALE: ICOM - 25H Good condition, original carton and operator manual, $145.00. O2AT, Mint, includes (together only): BC-35, (2) BP-3, BP-7, CP-1, HM-9, in original cartons with manuals, $417.00, Firm! Harry, NE8Y (813) 294-1144 after 8:00 PM EST.

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BACK ISSUES: A Duplicate of any back issue of the RTTY Journal may be obtained from: Red Wilson, WB0ESF, 4011 Clearview Dr., Cedar Falls, IA. 50613, $1.50 PPD & SASE. Reprints of both UART Articles $2.00 PPD.

FOR SALE: KENWOOD 940S/AT, mint, original cartons and operator manual, YK88C-1 installed, MC-85 included, $1575.00 (firm). TR-7850 with KPS-12, mint, (together only), original cartons and manual, $160.00 (firm). Harry, NE8Y, (813) 294-1144 after 8:00 PM EST

QCWA

The Dayton - Cincinnati Chapter 9 of the QCWA announces the 1987 QCWA Banquet to be held Friday night of the Hamvention, April 24, 1987 at Neil's Heritage House in Dayton. C.O.D. bar is at 6:30; with dinner at 7:30. Tickets are $13.00 each. Contact Bob Dingle, KA4LAU, 657 Dell Ridge Dr., Dayton, OH, 45429 for tickets and details. Come and join the fun and see many of your friends.

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