

PORT FE

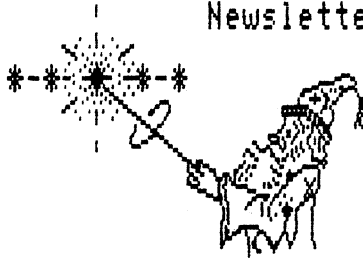
SORCERERS USERS' GROUP

(Toronto)

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S O R C E R E R

Newsletter



The Toronto Sorcerer Users' Group was founded in the Spring of 1979, a handful of willing and eager to learn members.

This newsletter shall at all times keep in mind the goal at its conception. To spread the seeds of knowledge.

Articles printed in this newsletter shall be free for all Sorcerer Users' groups to reprint or comment on as they see fit.

Articles submitted for this newsletter must be in no later than the beginning of the 1st of every month.

Aug 1981 ISSUE

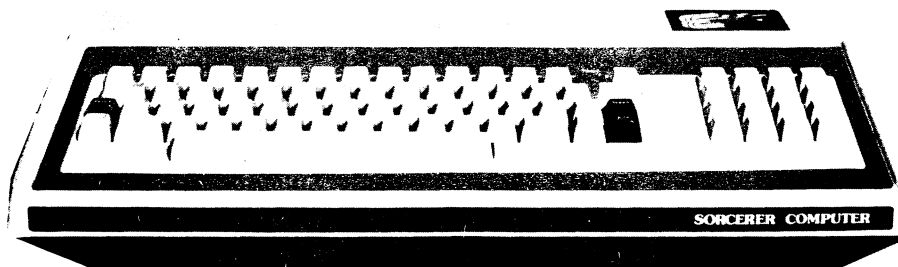
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MEETING PLACE

Location : Bathurst Heights Library - Date: Wed Aug 19 - 7:00 PM
3170 Bathurst St.

One block north of Lawrence on the west side of Bathurst.



Let me apologize for the delay that our postal strike has had on the PORT FE newsletter. We hope that this will be cleared up within the next few weeks.

Formerly this newsletter has attempted to cover a wide variety of informative topics. Those views have not changed much, only now we will give a stronger (closer) look at CP/M and associated programming.

Where is it all going to lead ??

In the last little while we have noticed that more and more people are getting DISK DRIVES. As with all things, time marches on and the availability of product influences those changes. Exidy, pushing for more and more commercial environments for the Sorcerer has almost forgotten about the computer hobbyist. Unfortunately this is also a game of life and death for the manufacturer. Exidy no doubt feels the squeeze as other competitors are after the same market. The only course for survival in the one that they have taken. The business world needs this type of computer for the small to medium applications in which it can be applied.

Let me make a few personal comments with reference to your systems and its future or demise. If you are a computer hobbyist then the excitement of having your own computer may wear thin or you may want a bigger and better one. Your chances for its disposal are greatly enhanced with its capability, and software that you have for it. A CP/M environment is probably your best choice. Should your system be limited, your return on your investment may not be as good as the next person having almost the same capability. I would suggest that you all view this very carefully, and either do one of two things. Maintain a minimal system if in doubt, or second, advance your system to its maximum capability.

Be ready for the time that you might wish to change.

----- RBBS ----- ???? ????

Whats this RBBS stuff ? Well this stands for Remote Bulletin Board System. These systems are accessed via MODEM, at 300 baud or more.

Most of them are set up by individuals to gain popularity and fame, or programs from their dedicated followers. Sometimes they are even set up as a business venture, to act as a go-between for stores wishing to advertise on the system. The users can then call in and place an order for merchandise at any time. This in some ways has its advantages. Now mainly the systems will sport an information exchange service, 'like a club', where users of the system, regardless of their equipment can exchange ideas and/or software. (only software that is in the public domain is available through the RBBS systems. Of course some of the users often have many things in common and the thrill of meeting some of them is always there.

Sometimes one of the members might have a technical problem that he can't solve and therefore will present his problem to the 'GROUP' per se. This will sometimes get action for him. At other times it is used to list various things for sale. (or wanted) In any event they serve some sort of service.

This also allows one to gain access to say, Apple users, TRS80 users etc.... In this way BASIC programs can be transferred say, from the Sorcerer to an PET or vice versa. Think also about transferring programs from one Sorcerer to another. It works very well, even with machine language programs. I must caution you that a disk system is not mandatory but is a great deal of help when transferring files.

Think about it.! It could save you a lot of typing....

by: H.A. Lautenbach

User Tips & Guides

In the last little while I've come across two very good books on Z80 & CP/M. For those of you who are still looking for the right technical information, and at a level that you can understand then you might have a look for these two books at your 'favorite' computer store.

'OSBORNE CP/M USER GUIDE by Thom Hogan' (\$16.65 Can.)

This outlines the different versions of CP/M that are available and their commands. Also covered are CP/M utility programs, technical aspects of CP/M, system recommendations and operating systems similar to CP/M.

'8080/Z80 ASSEMBLY LANGUAGE' (\$12.95 Can.)

Techniques for improved programming by Alan R. Miller. This book is written in a form which I find more easily understood. It covers everything that one should be aware of, and even goes as far as interfacing programs with CP/M. I would term this book to cover a lot more than just 8080/Z80 op codes which most of the others do. A good investment for anyone that is thinking of writing CP/M environmental machine language programs.

CP/M 1.4 vs. 2.2

What's the difference? This is the most common question that is being asked today. Well for those of you with 8" drives or 5.25" drives, let me tell you what the difference is. First, for those of you that are running Micropolis systems (slow ! slow! slow!) Your chances for 2.2 are limited to Lifeboat's version for the time being. I hope Lifeboat have cleaned up their act. Exidy version CP/M 2.2 will only be available for the 'EXIDY' Disk Drives, fellows.

(Push Push Push) Ahem !!!!

Now the basic difference is in the way the disk drives are handled (under software control) by CP/M. Next is the addition of more commands, the automatic disk density booting, this allows one to mix 1.4 single density disks in one drive and double density in the other. The CP/M system 2.2 will diagnose the diskette prior to accessing it. Last but not least it is becoming more and more prevalent that certain newer software is geared around 2.2 and won't run right without it. So those of you who are ignoring this step-up are only hurting yourself in the long run. By the way it's faster in accessing the drives as well.

If you can get it running on your system you will be better off, and as soon as you can too.

Disk Drives ? who me ? well which one ??

Well this one is best answered by your pocket book, and what you know or think you know.

Most of you debate in your mind whether or not you really need all that much storage space. Your pocket book tells you that you don't, in your mind maybe you're not sure that you'll put it to good use once you do get it and so on and so on !!! Your pocket book usually wins. Guess what, you're going to get yourself a 5.25" disk drive. Ok. which one? the Exidy or the Micropolis system. Duals or a single. Well it depends on two things, one - once you've made up your mind, its 'wonder if they got it in stock' well you usually can't beat the terrific deal that you get on the 'ones in stock'. If you're lucky it will be the one that you want, if not you'll take it anyway. Then there's the big spender who goes all out and gets the 8" drives right away (the others only wish they had them too) well maybe someday they will (usually not). These people put up with what they have or else their 'wives' tell them where to shove the whole system. Now this doesn't happen in business though.

The best advice that I can give you is that if you want to build up your system, you'll need 8" disk drives sooner or later (with CP/M 2.2). The accessing of the drives and the speed of reading or writing to the drives is much faster than the 5.25", more so with the proper BIOS see July issue of PORT FE.

EXBASIC with the on SCREEN EDITOR

A program 'insert' for EXBASIC
Released thru Northamerican Software

By Walter Blady

This EDITOR is a full-screen character oriented editor, and displaces in memory the standard Microsoft editor. Hardware & software requirements are... Exidy Sorcerer computer, EXBASIC.COM, CP/M

EDITOR operates on the screen ram area of Sorcerer as opposed to a copy buffer. Copy corrections are made on the screen first, then, following a carriage return, the line is sent to the program. This allows for a great deal of flexibility in copy manipulation. EDITOR is also capable of handling MULTI-LINE statements up to 254 characters long.

Command summary:

In the following a CONTROL CHARACTER will be denoted by an up arrow "^".

- ^E To enter or exit the EDITOR.
- ^V To enter or exit the INSERT mode.
- ^B To enter or remove the MULTI-LINE delimiter.
- ^N To erase to END of line.
- ^F To erase FULL line.
- RUB To erase character to LEFT of cursor.
- SKIP To erase CURSOR character then SHIFT line back.
- ^J To RETURN to left margin without sending line.

EDITOR normally recognises a 64 character line only. Copy will be LOST if it is shifted past the 64th column and additional physical lines will be ignored following a carriage return.

Before editing a line MORE than one physical line in length, a MULTI-LINE delimiter must be used. Place the cursor anywhere on the LAST physical line then press ^B. This will place a marker after the last character of that line indicating that ALL copy from the cursor to the marker is to be affected. To EXIT the MULTI-LINE mode and erase the marker, place the cursor anywhere BEFORE the marker, but within 254 characters, and press ^B a second time.

When editing is completed, place the cursor anywhere on the FIRST physical line then press carriage return. All copy up to the marker will be sent to the programme and the marker will automatically be erased. If the MULTI-LINE marker is MORE than 254 characters from the beginning of the command line, the line will NOT be sent and the marker will NOT be erased.

Summary:

This editor offers great flexibility in editing and debugging programmes. Complicated graphics can be constructed first, using cursor movement keys, then the lines assigned line numbers and print statements. Sections of programmes can be easily duplicated without retyping.

MERLIN - Ultimate DATA BASE system

Released thru Northamerican Software

written by: Dr. K.N. Geejeebhoy

INTRODUCTION

The Merlin data base system is designed to allow entry of data without a carefully defined plan and can be modified as necessary to obtain a final format as the data acquisition proceeds. This concept permits a flexible and dynamic approach to data gathering. At any stage the data can be analysed statistically, logically or displayed graphically and in a tabular form. In addition the data base system is defined by the program as data entry continues, so that several different files of data can be merged into a single program and analysed as a whole simply from the files already created by the data entry..

COMPONENTS OF THE MERLIN SYSTEM

The Merlin system consists of 6 different modules. They are as follows:-

SOMERLIN: This module allows data to be entered into a table either as numerical values or as letters(e.g name) and in addition can permit one or more columns to be designated as calculated functions of the data in other columns into which data has been entered manually. For example if weights of objects are entered in one column and the volume in another it is possible to automatically calculate density (weight/volume) and enter it in the third column. This calculator function can calculate complex equations including those with brackets and trigonometrical functions. The data can be stored in the disk and subjected to statistical analysis. In addition data in the main data base program to be described later can be stripped into the tables and re-manipulated by SOMERLIN.

Having created several tables we can merge them automatically into a large data base in which data can be correlated from different tables. There is complete flexibility to merge any combination of tables and analyse them in any form.

MERLIN: This program chains 5 different submodules designed to :

- 1) Create a data base either from the tables with data simply by entering the table names (file names in disk in which the data belonging to the table resides.) into the program or manually defining the data base as indicated later.
- 2) Entry of data into the data base created from the tables by again simply typing in the names of the disk files in which the data resides. Alternately the Entry Program will prompt the user to enter the data directly into the data base.
- 3) Get data from the data base by one of four modes:
 - a) Based on a key word to which a series of entries can be tied in different files. This mode allows rapid access to all data related to a name or number.
 - b) Based on the headings under which data was entered in the tables (e.g NAME, ADDRESS, BLOOD SUGAR).

- c) Based on the headings referred to above but with the added constraint of getting data between certain limits. For example AGES >30 or SEX=MALE or BLOOD SUGAR<300.
- d) Based on multiple parameters for example the computer can be asked to get records in which the following combinations of conditions are satisfied. NAME to be included if other conditions are satisfied, AND SEX=M OR SEX=F AND AGE>30 AND WEIGHT<200 OR WEIGHT>100 AND HEIGHT>150(cm).

All these options allow a print-out of data but in addition if desired the stripped data from the data base can be stored in a disk file to be statistically manipulated by the statistical program or for graphic print-out or to be reworked by the table program.

- d) STATISTIC PROGRAMS for standard statistics such as mean, standard deviation, paired and unpaired t-test, linear and parabolic regression, Wilcoxon's test and CHI squared analysis. Also there is a program for multivariate regression analysis.
- e) GRAPHIC display as a printout on a Diablo typewriter.

The Merlin program will also be released to basically run under any CP/M system with CBASIC or MBASIC. As of this time the system has undergone extensive testing. The program is already up and running in a TRS80 and is in the final stages of transfer to an APPLE system. This will also be made available for the APPLE & the TRS80.

TWO PROGRAM REVIEW QUICKIES

HEAD ON COLLISION from Quality Software

This program must be termed as one of the 'better ones'. It certainly has the action and the graphics that you like to see on your Sorcerer. It can amuse you for hours on end.(addictive) You actually competing against the computer when you play this race car driving program. The name of the game is to run over as many of the dots as you can around a circular track. These dots will give you points. Your opponent (the computer) will however try to smash into you, to prevent your getting a high score. He travels in the opposite direction than you. Your only defense is to switch tracks at the last minute to avoid a HEAD ON COLLISION. (recommended for all ages)

AIR TRAFFIC CONTROLLER from Creative Computing

This is a real time simulation program that puts you in the control tower, governing the actions at TWO airports. Your duties are (AHEM !!! simple) just direct the traffic.(if you can) For those that really like a good challenge, this is one program that will give it to you. Definitely not a child's program, you will be sitting on the edge of your seat the whole time and feel exhausted afterward. (anyone looking for a second part time job?)

Sarcastic comment: They should have let REAGAN play with this one before he fired two thirds of the air traffic controllers. He just might have changed his mind.

The Editor

SORCERER TECHNICAL TIPS

The NEW frontier. MODEMS ???

Well I must say to begin with, that this is not really a new frontier, it just may be for some of you. At some of our meetings we have discussed the possible (group) purchase of a number of modems. The question has always been one of price & which one is best. Well as we all know, you can't get the best for the least. I shall try and bring some facts to your attention, you may be aware of some of them and again you may not.

I shall try and cover these under a number of headings.

- | | |
|-----------------------------|--|
| (a) Used surplus modems | (e) Modem control (software) |
| (b) Home brew type modems | (f) RBBS typicals & not so typical |
| (c) Kits that you can build | (g) Remote Bulletin Boards of the future |
| (d) S100 modem boards | (h) Things to keep in mind |

(a)Used surplus modems - Used modems are not the easiest things in the world to get a hold of. The only ones usually made available cheap, are ones that have problems or are specifically not compatible with most of the systems (micros) that are in hobbyists hands. One of the major things to watch out for is whether or not it has RS232 input/output. Usually they will have RS232 output but not input. Well, you ask, what kind of input it has? It may be parallel TTL interface only, which would complicate things for you. Should you consider a used type of modem because of price, then ask to try it out first. Another point to watch for is whether or not it is an ORIGINATE ONLY modem. In this case you could never talk to another user that also has an originate only modem. Look for an ORIGINATE/ANSWER modem if you can find one.

(b)Home brew modem - If you have the necessary technical ability, by all means consider this as an option. But beware, you should also have the required test gear, ie: scope, frequency counter, voltmeter, soldering equipment, audio generator etc.. In this way you should be able to build one for around \$50 to \$75 dollars. There will be also about 10 hours time involved for construction & testing. If things go wrong!!! (probably more like 30 hours) before its working.

(c)Kits that you can build - These are also available from \$39 to \$150. Most kits will explain where to place components etc... Some kits come with very limited instructions, and one should always ask before-hand whether or not 'full' documentation is supplied with the kit. If you are in doubt don't buy it. This will probably save you a good headache later. Should the kit be supplied by a company outside of your area, be careful, check whether or not there are others that are using it first. If there aren't any others, do you want to be the guinea pig? I would say not. One other point is that with most of these do-it-yourself kits, they usually just contain the main P.C board and you, the user, must supply the power supply and the 'housing' or box in which it is to reside.

S100 Modem boards - These boards usually come pre-assembled & tested. You can opt to build it yourself and save from \$50 to \$100 if you want to put it together. Just remember it might be a little harder with these boards than the smaller and less expensive kits. These have a lot more to consider than just assembly. Software typicals are usually supplied, and involve the use of control & status ports. Some Sorcerers will require modification as per the 'JUNE ISSUE of PORT FE Pg. #6 which describes the modifications necessary'. These are not required on all Sorcerers only some of the earlier serial numbers. The symptoms are that all information transferred to the S100 via any port will be cut off at the 'E0' stage. All higher codes are not sent to the S100 board(s). These types of modems are sometimes very sophisticated, and include such features as multi-line hook-up, on board clocks, scratch pad memory, auto answer, and auto dialing capability. As you can imagine, the control software is more elaborate than you might think at first glance.

(e) Modem control (software) - There is software available for the Sorcerer from Quality Software. The program 'SMART TERMINAL' which is geared for the standard Sorcerer (not disk oriented) is ideal for a standard RS232 hook-up. This program does not however have control facilities for the S100 type modems. There are however programs in the CP/M users library, Modem7, and also various versions available in the form of assembly language listings which the user can adapt to run in his system. The least complicated program was the dumb terminal, released by Exidy right from day one almost. This program was supplied free for the longest time, but I understand that's no longer the case.

Spectra Electronics or Exidy may be releasing a disk oriented Modem Program in the near future, fully compatible with CP/M.

(f) RBBS typicals & not so typical - This stands for 'Remote Bulletin Board System'. There are literally hundreds of these 'call in free bulletin board systems' scattered around North America. These systems are run by stores, computer clubs, ham radio clubs, individuals etc... You will find that some of the systems are geared for specific computers like the Apple, Pet, TRS80 and any CP/M user. The main idea is 'information exchange' and you can leave messages for friends. Some systems will allow transfer of programs in ASCII and HEX files. The modem software that you use and the one the RBBS system uses should be compatible, otherwise some of the programs cannot be transferred to your system. The most simple means of transfer is of course 'text' files such as .ASM files and BASIC programs. The more complex RBBS systems use Ward Christensen's CP/M based modem program which does bit transference checks, and will not allow mistakes during transfer. This requires handshaking between both modem control programs. As you can see, things can get a little more complicated as time and equipment get more and more sophisticated.

(g) Remote Bulletin Boards of the future - will be linked via satellite. Tests have already been conducted via 'ANIK', between Vancouver and Ottawa Canada. Data transmission rates have been anticipated up to 48,000 baud. The modem control programs have followed in similar fashion but with just a little more protocol procedures involved. Data is transmitted in 'Packets', Blocks of information consisting of ASCII data up to 512 bytes at a time can be sent. PORT FE shall keep you informed of the progress of these new systems.

(h) Things to keep in mind - are as follows. Try to decide at an early stage, whether or not you wish to keep things simple or if you might get involved with sophisticated transfers of data. Whether or not you have the equipment and knowledge to 'Do it yourself'. I would not recommend that this project be taken on with an 'attitude of - learn as you go along'. The far reaching aspects may contribute to your revision of the modem system at a later date and you should take this into consideration when initially deciding on your course of action. Considerable time and money may be saved in the long run, not to mention modem control software modifications later. My old philosophy, try to do it right the first time, hasn't failed me yet.

Above all, learn everything that you can from friends about what types of modems they have and what they would suggest. 'Hindsight' can be used to your advantage.

Should any members have questions, or require advice, please feel free to write in. As time permits, your questions will be answered.

In the next issue we will, with permission, hopefully reprint the latest updated information on 'PACKET RADIO' which will outline the intended RBBS network configuration and the people involved. This for most of you will be a matter of general interest, and we will follow this subject only if there is a lot of interest from you the members. Should anyone have questions, bring them up at the meetings or write in to PORT FE.

SORCERER USERS' GROUP (TORONTO)

Membership Application Form

Covering Jan. to Dec. 1981

Membership to the group is not restricted to the TORONTO area. All persons willing to participate are invited to join.

As a member of the Sorcerer Users' Group (Toronto), I enclose the annual membership fee and agree to the following Terms.

1. That I will not, without the authorization of the board of directors, represent myself or take any action as agent, or representative or become spokesperson of the group.

2. That I will not use any software obtained from the SUGT library for any commercial purpose or financial gain. The library shall be available to me should I wish to obtain programs donated by other members. These programs shall not be distributed without the owners consent and/or the consent of the board of directors.

3. That I have the right to vote for the officers and directors of the organization at the annual general meeting.

4. That any breach of the above conditions and any other restrictions that the board of directors may invoke in the future on my part may result in suspension or termination of my membership without refund.

Annual Membership Rates : (Jan - Dec)

Canadian - \$15.00 Cdn - U.S. & Foreign \$15.00 (U.S Funds) PLUS \$8.00 Postage

Payable to - SORCERER USERS' GROUP (TORONTO) - by Cheque or Money Orders.

The SUGT program library is available to all members in the following manner.

You may send \$6.00 for each volume as they become available and we shall supply the cassette/s. Program cassettes shall be sent via Air Mail.

All issues of PORT FE shall be mailed first class, in the case of non local issues, they are mailed via Air Mail. Past issues of PORT FE are only available for the current calendar year. Contact the editor, he will advise the amount of payment for previous issues.

NAME(print):.....
ADDRESS:.....
CITY:.....
POSTAL CODE:.....
TELEPHONE: Res..... Bus.....

Payments enclosed (membership):..... Library tape/s.....

Signature:.....

Please list the type of equipment you are using etc...

Sorcerer size: 8... 16... 32... 48... other..... S100... Graph board.....
Disk system - Micropolis..... Discus..... Exidy..... other... Size.....
Other Equipment

If you belong to any other Sorcerer Users' Group please list it below.