

# THE TORPET

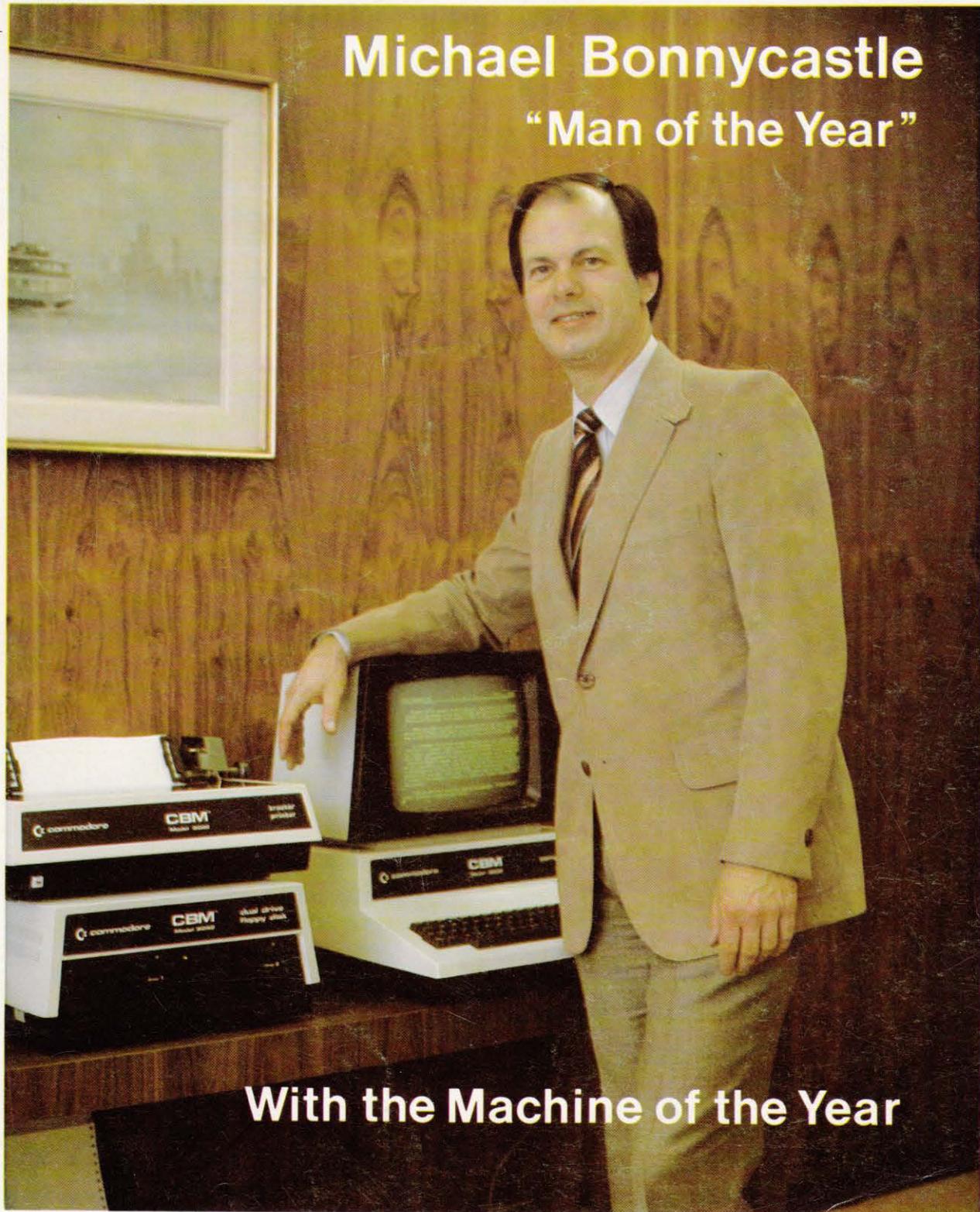
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The INDEPENDENT Commodore Users' Magazine

No. 16 Jan. 1983

\$2.00

## Michael Bonnycastle "Man of the Year"



With the Machine of the Year

# VIC-20

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# EATON'S

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## TPUG 1983 Schedule

### Central Chapter

Meetings are held at 7:30  
at Leaside Public Highschool  
Bayview & Eglinton Avenues

Wed. Feb 9 1983  
Wed. Mar 9 1983  
Wed. Apr 12 1983  
Wed. June 8 1983 (last meeting)

PET Conference  
May 14,15, 1983  
at George Brown College

### Westside Chapter

Meetings are held in the cafeteria  
at 7:00  
at Sheridan College, Oakville  
on Trafalgar Road  
(2 miles north of the Q.E.W.)

Wed. Feb 23 1983  
Wed. Mar 16 1983  
Wed. Apr 18 1983  
Wed. May 18 1983  
Wed. Jun 15 1983 (last meeting)

# TORPET'S MAN OF THE YEAR

## Michael Bonnycastle

This year the TORPET has chosen Michael Bonnycastle as being the Man-of-the-Year. It has always been a debate among political scientists as to whether it is the times that create the man or the man that creates the times. Whenever, any great and successful movement has taken place there have been a pair of individuals that have risen to its head. One a charismatic leader and the other an able administrator.

Many examples of this combination can be given in history, the current rage being the show about Ghandi and Nehru. TPUG has become the largest computer club in North America and may be on its way to becoming the largest in the world. There is no denying that TPUG's charismatic figure has been Jim Butterfield, (who has appeared on TORPET cover's twice), but the administrative cohesiveness resulted from finding the the right man at the right time - Michael Bonnycastle. TPUG has dynamically changed in the past, is dynamically changing in the present, and hopefully will dynamically change in the future under Michael Bonnycastle's able administration.

Many individuals of diverse talents have put in great amounts of effort to the club, and in the process have indelibly put their imprint upon it. The extensive efforts of last year's TORPET's Man-of-the-Year the TPUG's secretary and now TPUG's business manager, must never be underestimated or under appreciated. Nor must be the marvelous accomplishment of the now retiring club librarian David Hook, in creating the world's largest public domain library. Nor the contribution of the bulletin board system by Steve Punter, and the year long efforts of Gord Campbell and his conference committees that go into creating the spectacular annual event that we are about to witness once again in May.

Let me not fail to mention the efforts of the VIC group and Machine language group co-ordinators, and the regular attendance, participation and efforts, of the other members of the executive, and numerous committees that have existed from time to time. And I hope none will think it boorish of me to note, the seldom mentioned, although I hope not unrecognized, accomplishments of the TORPET itself.

Each of these, while noteworthy in their own right, one and all attest to the administrative talent of TPUG's president to bring together and co-ordinate so many persons of such greatly diverse talents and personalities to achieve the outstanding growth that has been attained until this date.

What sort of man is the TPUG president? Unfortunately, he is not personally known to many of the members of what has become TPUG's far flung membership of nearly four thousand members, at this writing. Even the five to six hundred attendees at a central meeting must know little about the individual who stands down at the front and conducts the proceedings. So I will try to share with you a few of my personal impressions.

Michael Bonnycastle actually lives in a bonny(good) castle located in an exclusive part of Toronto called Wychcliff Park. His very large home, once the studio of a well known artist, and later taken over by the Toronto Art Gallery, before being sold to the Bonnycastle's still is a showplace of artistic endeavors, the walls covered by murals from the previous owner and objects du art since added by the Bonnycastles. It is in these delightful surroundings that the TPUG executive has had the pleasure of meeting for the last several years.

Michael's cultured tastes are reflected not only in his home atmosphere where his musically and artistically accomplished family share his esteem, but also in his office environment. There along with the paintings in his tastefully decorated office hangs a M.B.A. diploma from the Harvard Business School. Sharing his office with him is his able associate and co-worker, Louise Redgers, who holds similar credentials.

Michael's company, Wycor Business Systems, has been dealing with Commodore based (and larger) business systems ever since the PET first became available. The author has several times recommended them to persons seeking systems as being one of the most knowledgeable consultants of his acquaintance.

Michael's contribution to TPUG have not been in just the administrative capacity, but he has also made substantial contributions to TPUG's library in both the music and adventure areas. He is an avid fan of both.

The Bonnycastle roots go far back into the founding families of Canada and the activities of the present generation are undoubtedly having a significant effect upon Canada's future. Most certainly so, in the eyes of those of us who feel that the micro-computer is having a dramatic effect upon the destinies of our youth.

As the old song goes, "to know him is to love him" and I hope through this little essay more of you will have come to know better, our president, Michael Bonnycastle!

# The Machine of the Year

Time magazine has selected the personal computer as the machine of the year. Those of us who are its enthusiasts probably more nearly consider it as being the machine of the century. It is certainly also the machine of youth.

Would anyone challenge the statement that there is a much greater percentage of persons under the age of 20 who own a computer than there is over the age of forty. We can imagine that even with all the computer professionals that there are in the world there is in some sense an even greater aggregate degree of computer literacy on the part of those under 20 than of those over 40.

Each generation that has grown up with its own unique technological revolution (and that covers all the presently living generations) has been profoundly affected by it. We have living with us today the remnants of that generation that saw the advent of the automobile with the resulting geographic mobility that permitted the spreading of the suburbs of megapolis. Some say the resulting anonymity precipitated the current moral decline, contributed to the breakdown of marriage, and the increase in crime. It certainly enormously increased travel fatalities.

A more recent generation has been affected by the revolution in the communications field. Dramatic psychological changes have been attributed to television and radio as a result of the prominence of sex and violence. Consumer tastes have been extensively affected by the all pervasive advertising, much of it subliminal in nature as a result of the idealized model lifestyles presented in thousands of hours of drama to the developing minds of that generation. Again, some postulate, there were resulting profound negative changes in the work ethic, attitudes towards thrift, and scholastic achievement.

The communications revolution may have even affected the literacy levels to such a degree that this editor is seriously concerned about his younger audiences' ability to read what he writes.

Moreover, the continuous availability of entertainment has created such an incessant demand for amusement on the part of the TV and subsequent generations that many of them are little inclined (or perhaps capable) of giving thought to serious issues such as are being presented here, or even to personal introspection. Their need for continuous external mind control such as through the omnipresent rock music, even when walking or doing other activities, has perhaps caused permanent brain damage. There is certainly significant evidence that it has caused permanent

hearing damage to many members of these generations.

And now comes a new generation, being affected by still another major technological revolution. The micro computer. Just as Henry Ford intoned the social benefits that he felt would come from the automobile, and just as the early pioneers of television and radio felt the new media would be a boon to education, we the foremost advocates of the bounties to be had from the micro computer extoll its virtues. But let us not be blind to its dangers. It took many years to establish minimal safety standards (such as safety glass for the automobile) and the battle continues today over satisfactory exhaust emission standards and passive resistant devices for collisions.

As for television we are just beginning to identify and wrestle with many important issues such as cultural effects (I am sure my southern readers have never heard the expression 'Canadian content'), regulation of children's time advertising, censorship of sex and violence, regulation of coverage in the courtrooms and legislatures, thoroughness of news coverage (a very major topic), freedom of international communication via satellite, the effects of propaganda, the justness of frequency jamming, the international regulation of frequency usage, and many others.

The micro computer is so new that we have probably not yet identified all the problems. There is however, even discounting the antipathy and antagonism of the computer illiterate generations, a general feeling of uneasiness about some potential by products of the micro computer revolution. There are, of course, the currently recognized major social issues such as the aggravation of unemployment by microprocessor controlled automation, the disruption of institutionalized economic procedures by EFT (electronic funds transfer), and the breaking down of conventional concepts of privacy resulting from the establishment of data banks and rapid widespread telecommunications.

There are also more subtle, but equally significant, hazards that are intuitively felt but are not yet susceptible to widespread vocalization. This lack of vocalization is not due to any reticence on the part of critics but is simply due to the fact that the revolution has taken place so rapidly that its implications are not yet well understood.

Among some of the dangers, or at least fears, so far tentatively identified, is the suspicion that a computer in the home may further detract from the time that a young person will devote to serious studies and activities of self improvement.

Furthermore, there is some indication that long periods of exclusive person/machine interaction may result in retardation of interpersonal socialization skills.

Computer games have many of the attributes of television fantasies but are coupled with the additional facet of real time interaction at one's own decreed level of acceptability. This could be one of the contributing factors to the decrease in the above mentioned skills because while it aggravates the current younger generation's incessant demand for amusement it may also accelerate their desires for immediate gratification.

Both television and micro-computers can add to man's alienation from reality and the development of undesirable social attitudes. Persons watching an event on TV (such as a building on fire) can often barely discern whether it is fiction, a re-enactment of an event that took place a hundred years ago, a film clip from ten years ago or the previous night, or is being transmitted by a camera currently on the scene. Given such lack of time and reality orientation what is supposed to be one's response to the horror of a body burning to death before their eyes.

The current strong emphasis on violence and destruction that we find in many computer games may well contribute to the alienation of a generation that will be admirably suited for push button warfare but would most of us consider this a desirable goal?

Lest anyone think that this editorial has an anti-technology orientation let me assure them that it does not. The writer is well aware of the boons that have been brought about by the automobile, television, and the many other advances of modern technology. The recipients of that technology have a greater standard of living, more leisure, a higher social awareness, and more opportunities for diversity of development than any previous generations, but they are also subjected to new and unique hazards. Technology may also have contributed to many of man's current social ills such as alienation, incipient selfishness, social insecurity, fear of the future, and an oftentimes overwhelming dependency on some form of material gratification.

As stated earlier, our readership may be young, and becoming younger. It may be also, because of the deleterious effects just described, that many may be incapable of participating in the present dialogue. However, the issues are too important, and the opportunity too precious, to sacrifice it to the tyranny of the uncomprehending. Therefore, it has been the editor's new year's resolution to create, if possible, in at least one little corner of the TORPET a forum where the great social issues surrounding the micro computer can be debated.

In subsequent issues, in addition to the major social questions mentioned previously, I hope also

to examine such subjects as:

Patents and copyrights - are they beneficial to society and if so how should they be administered?

Innovation - what is the role of the giant corporation versus the smaller and garage type innovators?

Government incentive and control - Is there too much or too little? What directions if any should it take?

Education - are computers being properly used in the schools and if not what changes should be made?

Computers in the home - what are the problems and how can they be better utilized?

Games - is there too much violence and are they too time consuming? If there are problems are there also solutions?

Standards - Should there be compatibility standards between hardware and software manufactures?

So, please come to the feast, and make your contribution. As a starter, the first subject to be discussed in our series will be the question of censorship on the the bulletin boards. The opening shots are to be found elsewhere in this issue.

# THE TORPET

pays

**\$20.00** per page

[ We also pay for pictures ]

Appearance will usually be in the next  
(or the next following) issue.

**WANTED**

**Reporters to cover special assignments. Are you attending a convention, going on a trip, visiting a factory, or manufacturer? Are you willing to review a product or take on a special assignment? Whatever your story idea, please contact us ahead of time so we won't overlap on stories.**

No matter where you live, if you are willing to take on a special assignment, please contact us. We have ideas and projects for articles.

This is the largest independent North American circulation devoted solely to Commodore readers.

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The TORPET Editor  
Bruce M. Beach  
Hornings Mills  
ON L0N 1J0  
Canada  
(519) 925-5376 (office)  
(519) 925-6035 (home)

If you have what you feel is an exception article we will be glad to discuss your remuneration requirements if you wish to submit it to The TORPET.

# Message from the President

## NEW ERA FOR TPUG

A few major steps have been taken by your club over the past few months - steps which I believe will not only strengthen the club from a structural point of view, but give it the ability to provide more and better services to its growing number of members.

Firstly, the job of answering your requests and looking after the business of the club has grown to the point where permanent staff is needed. Chris Bennett indicated that he was prepared to take on the job of Business Manager for the club, and we have accepted that offer. Chris will be employed by TPUG and will have the responsibility of the club business on an ongoing basis. At the same time we have had several outstanding responses to the TORPET ad, and in addition to Chris, Dorris Bradley has been selected to work with Chris on the TPUG staff. Dorris brings a wealth of experience with her background in information services.

Secondly, a permanent office for carrying on the TPUG business will be established. Office space is currently under consideration and by the time you read this, an office location will be settled. There will be a business telephone and a place where members can go for further information on the club, collection of articles, sending material, etc.

Thirdly, incorporation is well on the way and we should shortly be known officially as TPUG INC.

I feel this is the beginning of a new stage of development which should add a new dimension to your club. I am looking forward to the times ahead, and the vitality which this new era heralds.



Michael Bonnycastle  
President of TPUG

## TPUG Librarian DAVID HOOK Retires



Dave Hook

TPUG is losing one of its ablest and staunchest supporters with the retirement of its librarian, David Hook.

Dave has served as the TPUG librarian since the founding of the executive and has supervised the growth of the library from a size of several hundred to several thousand programs.

Business commitments to his employer were the main cause of Dave's resignation. He has been asked by his employer to seek office and serve in one of his industry's professional organizations.

Dave has also been teaching at a college, so with the immense growth of the library, and his other commitments, it has become an impossible task for him to continue as librarian.

Both Dave, and his wife Gail, have been contributors to the TORPET in the past. It will certainly be a challenge to TPUG to find an adequate replacement for Dave. The thousands of beneficiaries, throughout the world, of Daves's work on the library will certainly wish to join us in extending our heartfelt - "Thanks!".

# 1983 TPUG CONFERENCE

by Gord Campbell



Gord Campbell  
TPUG Conference Chairman

Rob Lockwood is coordinating the speakers for the conference. If you wish to make a 45-minute presentation, give Rob a call at 483-2013. Rob will also be 'putting the arm' on people to meet the information needs of the members. One of the benefits of the conference format is that topics can be covered which are of interest to a relatively small number of people.

We will be contacting dealers shortly to arrange displays. Dealers will be encouraged to offer products for sale at the conference, which is a major change from last year.

## ALL DAY COPY-SESSION

Of course, the main attraction will again be the copy-session. This will be your big opportunity to get copies of all those programs which you have missed out on. If you can loan the club equipment for the weekend, please call me at 492-9518.

## Machine-Language Presentation

TPUG has arranged with Jim Butterfield to have a one-day 'Introduction to Machine-language' presentation on May 14, in conjunction with the conference. The exact format will depend on the number of people who will be attending; therefore advance registration is REQUIRED. To register Gord Campbell a call at 492-9518 any evening up to February 20.

There will be no cost to TPUG members.

Plans for this year's conference are now shaping up. The location will be the same as last year, at the Casa Loma campus of George Brown college. The dates will be May 14 and 15; yes, that's right, a two-day session.

The main difficulty with a two-day conference is the need to have more people helping out. If you can help, please call me any evening at 492-9518. Any amount of assistance, either before or during the conference will be much appreciated.



Some scenes at last years TPUG conference.

# PROGRAMMING CONTEST

## MORE ON THE TPUG PROGRAM CONTEST

The closing date for the contest is set for March 16, 1983. Have all your entries into any of the executive by midnight, Wednesday March 16. Winners will be announced at the April meeting.

As a result of several questions, a few clarifying notes are added to the rules:

a) Waterloo basic is acceptable.

b) Professional programmers are those who derive a substantial part of their income from programming. If you have simply sold a program or two, but you spend most of your time doing something else, then you are eligible for the contest.

c) A commercial program is one which has been developed for the purpose of sale either to a single buyer on a contract or for sale generally through stores or by mail order. If entered, it is clearly understood that the program is not intended for commercial use.

d) All programs entered not only become the property of TPUG, but they will be placed in the Public Domain for general use.

The rules of the contest are repeated below, be sure to get your entry in as soon as possible.

### TPUG Contest Rules

There are two categories, Games and Applications.

1. Entries will be judged on the basis of originality, utility, method and ease of operation, self documentation and presentation. The Judges will also consider the internal documentation, programming technique and logic (is it easy to follow?). Good use of graphics will also be taken into account if appropriate.

2. A primary requirement is that the program WORKS!!! We will not take the time to debug a program that crashes midway through it's performance.

3. If a program requires documentation to explain how it works or how to use it, and it cannot be contained in the body of the program itself either as REM statements, or as PRINT statements, then a separate documentation file may be provided.

4. The primary program code must be in BASIC. Machine Language portions may be used, as long as their use is clearly documented and well documented source code is provided. The use of a machine language utility (eg. a machine language sort subroutine) is permitted without documentation as long as it is in the public domain and the source is named - eg from a TPUG utility disk, and the reason for it's use is explained.

5. Points will be deducted for:  
-having to list a program to figure out how to use it.  
-crashes caused by syntax errors.  
-crashes which require resetting the machine.

6. Programs must be written by the person submitting the entry, they must be original in form (please - no more Star-Trek programs), and they must be non-copyright. Further, they must not have been previously published, nor may they be commercial products.

7. Entrants are restricted to amateur programmers. NO professional may enter. Entrants may not be on the TPUG Board of directors, nor may entrants be on the judging committee. Further, anyone with the name of JIM BUTTERFIELD may NOT submit an entry.

8. Entrants must be paid-up members of TPUG as of the date of entry. Associate members are welcome to submit an entry.

9. All programs submitted become the property of TPUG, and it is expressly implied that all entrants agree that the programs submitted may be included in the Library and may be distributed to members.

10. Programs must be submitted on a 4040 format disk, or on a Vic tape with the entrants name and the words TPUG PROGRAM CONTEST clearly printed on a label attached to the disk or tape, and clearly included at the front of the program in a REM statement. Disks only will be returned after the contest with a selection of programs received during the contest. Tapes will be returned as received.

11. Programs will be accepted prepared to run on a Vic or on a Commodore 64.

12. The judges decision shall be final, and prizes may or may not be awarded in some categories. At the discretion of the judges, special prizes may be awarded for special merit.

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## **6502 MACHINE LANGUAGE WORKSHOP**

Sheridan College is hosting two, two day workshops on 6502 Assembly Language programming for the Pet, Apple, and Atari computers. Participants will study the conceptual foundations of machine language programming, learn the most useful commands in the 6502 instruction set, and write working assembly language subroutines and programs. All computer time and manuals are provided for this intensive two day course. The only prerequisite is an elementary knowledge of BASIC programming.

Topics in the course include:

- I. Machine Language: An Introduction to the Naked Chip
- II. Hexadecimals: I Wish I Was Sixteen Again
- III. The 6502 Registers: Barney Does His Boring Job (and Does It Again)
- IV. The 6502 Instruction Set: Tiny Commands For Total Control
- V. Assembling and Disassembling: Putting It Together and Taking It Apart
- VI. First 6502 Programs: Life in the Fast Lane

The instructor for the course is Kem Luther, Ph.D., a teacher in the Computer Studies Program at Sheridan College. In addition to teaching programming at Sheridan, he has several years experience in writing and publishing commercial programs for the major microcomputing systems.

The two workshops will be held at the Oakville Campus on March 21-2 and 23-4, 1983. The fee is \$150 for the two days (including lunch). Further information and reservations may be obtained by calling the Sheridan College School of Computer Studies at 845-9430, 823-9730, or 632-7081, ext. 142.

# Bulletin Board Review

Richard Bradley

It has been two or three months now since the last article I wrote was actually submitted. In that time a lot has changed on the BBS scene around Toronto. BBSs have moved to new locations, some have folded, and there are even some new BBSs that are alive and well.

First we should get rid of the BBSs that have died in the past three months.

Connection-80 North York, a TRS-80 based system folded in mid-November for the main reason that the SYSOP didn't want to do it anymore.

Connection-80 Willowdale, another TRS-80 system also folded in November. This was mostly because the main expectations that the SYSOP had in mind were just not happening.

And now as to the new BBS numbers since my last article

It has been rumoured that the SYSOP Vic Kass will be setting up a new BBS sometime in January. This will be reported assuming a new BBS does exist.

The NORTEC BBS is a PET based system run by NORTEC. (NORTEC is the name of the computer club at Northern Secondary School. I happen to be the NORTEC president.) Our system has moved from operating at my home, to operating from Northern Secondary School. As fate would have it, we moved two days before the last edition of the TORPET was to be mailed. Because of this the phone number that was then printed has changed. The number was 782-7320, and it is now 487-2593. This has created some minor confusion with some of the members that are just getting into BBSs. We recieved many calls from TPUG members looking for a Bulletin Board. We had many from the Metro Toronto and surrounding areas, but we also had a fair number of calls from such places as East Taunton, Mass., and West Virginia. Much to my delight almost all of these calls have disappeared.

The APPLE-CAN BBS has moved from 781-1796 to 447-8458. (I have not been able to log on there yet, but that may just be a minor problem that they have encountered.)

The Toronto Heathkit Users Group (THUG) has moved from 273-3011 to 231-4174.

The Toronto-Networks BBS charges \$15 for membership, and is offering the usual BBS at 445-6696, but now have a second one running. To use this BBS you must be a subscribing member of the first BBS, because of this the number is not to be published.

The RCPM (Remote CP/M) BBS has also moved, the new number is 231-9538. This BBS is now called RCPM1. The operator of this system has expanded it to include a second BBS that is also CP/M supporting. This BBS is called RCPM2, and the number is 231-1262.

We have a new BBS on-line. This BBS is an IBM Personal Computer supporting system. The number for it is 499-7023. (I must say I am glad to see new BBSs to help take up the slack from the ones that folded.)

There is also an OSBORNE supporting BBS on-line. Its name is OSBOARD, and is SYSOPed by Simon Ewins. The telephone number for this BBS is 626-8066. (Simon was the person nice enough to loan the NORTEC BBS a phone answering machine during a week that they were down.) Glad to see a BBS running under the direction of such a fine individual.

Here is the new list of BBS numbers:

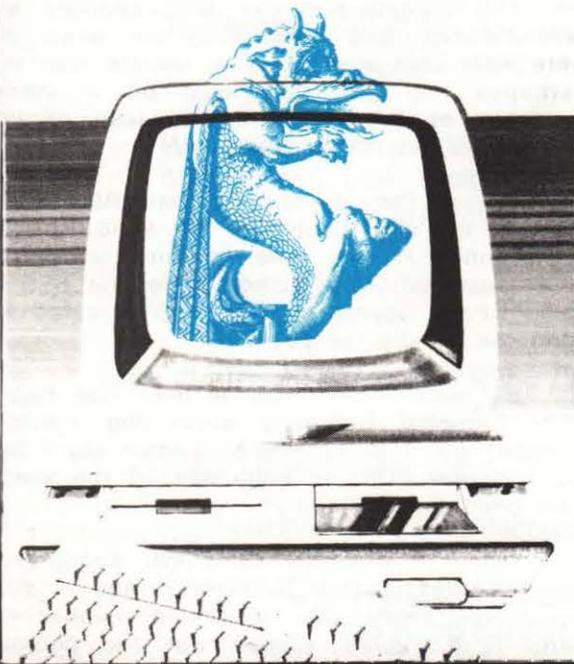
## Area Code 416 BBS numbers

NORTEC BBS * (24 Hours)	487-2593
PSI-WordPro * (7PM-9AM)	624-5431
TPUG * (7:30PM-9AM)	223-2625
R.T.C. BBS * (7PM-9AM)	884-6198
Atari Info-System (24 Hours)	622-2462
Apple-Can (24 Hours)	447-8458
ETI BULL BBS (5PM-9AM)	423-3265
Infoport (24 Hours)	278-3267
Toronto Net-Works 1 (24 Hours)	445-6696
Toronto Net-Works 2 (24 Hours)	???-????
THUG (approx. 7PM-7AM)	231-4174
RCPM1 (24 Hours)	231-9538
RCPM2 (24 Hours)	231-1262
IBMPC BBS (24 Hours)	499-7023
OSBOARD (10PM-8AM)	626-8066

(\* =PET Based Systems)

As you can see the last 2 months have been quite busy on the BBSs, two died, four moved, and four have been born. With all this activity, we have remarkably gained the services of two additional BBSs. This type of activity is not usual, and I hope the BBSs will have the same numbers they have now when, and if, you call them.

## YOUR PET NOT AS FRIENDLY AS IT USED TO BE?



# The Transactor

The Tech/News Journal For Commodore Computers Vol. 4

Maybe the colour seems to have gone out of your Vic. It's probably not something your dealer can do anything about. Your problem is simple. You've got a troll living in your computer.

Yes, we used to think that it was silly stuff like lack of documentation or poor availability of software that turned people off their systems but modern technological understanding has banished such odd notions. We now realize that after you've had your computer for a little while the mystic spirits of the nether world crawl into it between the keys on the keyboard and grow tiny trolls under the chips. As they mature they send off powerful vibrations that subconsciously make your computer resemble a plate of freeze dried asparagus. No wonder you've lost interest in it.

Most systems, when so afflicted, are doomed. However, recently a new publication has emerged for the owners of PETs, CBMs, VICs, Commodore 64's and related systems which especially caters to owners of these machines who suspect troll intervention. Called the Transactor, it is crammed full of amazingly useful software which not only makes your system eminently more useful to you but also sets up an internal atmosphere which is not conducive to troll growth. After a few issues of the Transactor your Commodore computer will be troll free and doing things you'd have never thought possible.

A year's subscription (6 issues) is just \$15.00.

**The Transactor, Subscriptions Dept.**  
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# BULLETIN BOARDS

## A Bulletin Board Proposal

As many bulletin boards as there are it is reported that it is still very difficult to get on to them because of the amount of traffic.

The time has come for a general expansion in the number and specializations of the bulletin boards available.

This expansion could initially take place as a public service between two groups of people one; the knowledgeable sysops in the clubs and two; organizations (service, civic, social, and governmental) that would be benefitted.

There comes to mind an almost limitless number of types of bulletin boards that could be established, and of organizations that should be willing to support them. The cost to the organizations would be substantial but not really all that much considering the benefits to be received.

A movie theatre association might be willing to support a board that listed theatre showings and that permitted users to make reviews, comments and suggestions.

Various sporting organizations might maintain a bulletin board that gave a schedule of events along with scores and team, or individual, standings.

Large game clubs, such as chess, bridge or what have you, might have one enthusiast willing to maintain a bulletin board for their particular interests.

The main draw back to implementing such a proposal is the lack of overlap between computer enthusiasts who have modems and those interested in other activities. But, with the rapidly expanding number of less expensive computers such as the VIC, it will become more and more common for a family with diverse interests to find that one member of the family has a computer.

The same problem faces the implementation of widespread bulletin board systems as faced the implementation of the telephone, radio, or television. It takes a large user base to make the systems useful. In actuality the home computer has spread much more rapidly in a shorter length of time than did any of the other mentioned technologies. With a small amount of effort we could have a great number of very useful bulletin boards.

The key to rapid deployment is that knowledgeable persons in the computer community offer to become volunteer sysops for some of the new systems in order to get them started. There are many government agencies that should be willing to support such an idea and be able to provide the funding for the equipment.

Two examples would be the weather bureau and the roads department (the latter for information about road conditions). If separate systems were not felt to be justified at the outset then perhaps they could share a system. If these two organizations are not sufficiently far sighted to see the benefits they could provide to the public then perhaps some organization such as the association for ski resorts would sponsor it in the beginning.

Bureaucratic objections that not everyone has a computer ought to be answered that not everyone has a telephone either, nor does everyone require their particular service, but they still provide telephone answering machine service. It can also be pointed out that this is a growing trend and that it is especially beneficial to persons who are deaf. In fact the society for the deaf should be particularly enlisted in making appeals for services that would be beneficial to them.

These are but a few suggestions among many hundreds of others that could be made. A perusal of associations in the yellow pages will give one an idea of the immensity of the opportunity. Some ambitious young person might start up a consultancy business for this very purpose. There is almost no professional organization that could not eventually find useful purpose for a bulletin board.

The rapid electronic interchange of information by a bulletin board system has many advantages. This is not to say that it is going to replace either telephone conversations or the printed word because each has its own peculiar advantages but it does certainly have its place in our society. Continuously available and continuously updated information will be a boon to almost every individual in some aspect of their lives.

Individuals in both agriculture and husbandry could have as up to the minute stock market information as does the individual stock broker. The business traveler and the recreation seeker could have extensive and detailed information at their fingertips without having to listen to extraneous information that is of no real interest to them.

What small systems, like those being described, may grow into in the future - it is impossible to tell. Those watching the Wright brothers plane could never have envisioned the 747. Undoubtedly changes in technology will have to take place. Many users of a system will eventually require many incoming lines, a larger time sharing computer, and specialists in maintaining its data base.

There exist grandiose commercial schemes for providing through the home TV many of the same types of services being suggested here. There are many institutional and financial reasons why those schemes have so far been floundering. What is being suggested here is more of a grass roots movement. Its success depends upon the interest and efforts of knowledgeable computerists.

Now that TPUG has a full time executive and central office it may be that a committee could be formed to encourage and assist in some organized fashion the development of new bulletin board systems. This idea has potential for much real benefit to many people, and it may take some of the pressure off the current bulletin boards, (or it may make them even more popular). I hope someone does something about it.

## Bulletin Board Up-Date

by Richard Bradley

Here is a quick report on what has been going on lately on the Toronto PET based systems:

### TPUG BBS

**SYSOP - Tony Prijately**  
**ASSISTANT - David Sideris**

Much to my delight the TPUG BBS has itself a new ASSISTANT SYSOP. I would like to wish the new ASSISTANT David Sideris all the luck in the world.

### NORTEC BBS

**SYSOP - David Bradley**  
**ASSISTANT 1 - Richard Bradley**  
**ASSISTANT 2 - Gord Mahaffy**

With the move of the system several improvements have been made. The system is now running on an 8050 dual drive. This brings the on-line storage to 1 megabyte from the previous 340K. The system has also a new additional ASSISTANT SYSOP, bringing the SYSOPing team to a powerful three.

The system has a problem in that too many people trying to use the system. To try and compensate for this problem a 30 minute time limit has been introduced.

A popular feature is the BBS Word Of The Week contest. This contest was initiated by the SYSOP, and works like this. A word is chosen by a person who takes the assumed identity of PUZZLE WORD. Entries are made by anyone in private messages to PUZZLE WORD. At the end of the week PUZZLE will judge the definitions by creativity, but sometimes putting in the dictionary version can help an entrant. At the end of the week the title of PUZZLE WORD is passed along to the winner, and he or she will then pick the next word of the week. TPUG members seem to excel in this contest, such people as Tom Shevlin, Carol Shevlin, David Williams and the SYSOP have all shared the highly coveted position of PUZ.

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In the future there may possibility be some slight modifications to this BBS, as the SYSOPs feel that some improvements could be made. (Sorry Steve, but no-one writes a "PERFECT" program.)

### PSI-Wordpro

**SYSOP - Steve Punter**

Not much excitement has occurred here. This BBS seems to have evaded much of the controversy and growing pains that the other BBSs are experiencing. This is probably due to the fact that it is the oldest of the local PET BBSs.

### R.T.C. BBS

**SYSOP - Troy Hacker**  
**ASSISTANT - Richard Bradley**

At the moment RTC is in the middle of a boycott by some BBS users. This has resulted over some censoring that was done by order of the management of Richvale Telecommunications. To explain this whole argument simply, there was a debate going on the BBS that dealt with the pro and con sides of abortion.

The debate was not heated, it was progressing as most of the BBS debates do. It was then that the management stepped in and deleted all the messages that were involved in the debate. This outraged the parties involved, and many other users, thus the boycott.

**This brings up  
many interesting questions:**

1. Should a system that is open to the public be censored?
2. Should people be discussing such items on public systems?
3. Should ground rules be set as to what subjects will not be tolerated when the BBS is put on-line?

**On the other side  
of the argument:**

1. Does the institution that funds the system not have the right to delete material that they feel is offensive?
2. This of course leads to the question of what is offensive, and what is not?  
Only time will tell as to what will happen. I will tag this story "TO BE CONTINUED ....".

That is about all the news, hope to hear from some of you members soon.

# Reply on Censorship

## by RTC Management

I have been asked to reply to an article written regarding the use of RTC's BBS and the fact of censorship being applied to the material being put on the Board. I have not had the opportunity to see the article, but understand the basic content of the editorial (see note: -ed.) has been written in condemnation of our deleting material put on the board.

Whenever the word "Censorship" appears immediately people get up tight and raise a great cry against those who apply what they consider censorship. They seem to feel that it is a personal affront to them. Why I don't know, since there are many restrictions put on us by society and rightly so. If everyone was free to do as they please regarding traffic laws, etc. one can envision the utter chaos that would result. Maybe we ought to make a noise about the unjust traffic laws that restrict our "freedom"

The whole problem of pollution of our air, water and land has caused a great deal of concern and steps are being taken by governments and various bodies to correct these problems. Almost everyone agrees that this is good for the preservation of our environment for future generations.

Pollution of the mind is just as bad, if not far worse, yet if a cleanup is done in this area then you are censoring. It seems some people want to wallow in the filth and degradation (sic) of the gutter and subject others to it as well.

We in no way want to restrict serious debate on our BBS but it must be done in a proper way. The English language is a wonderful medium for expressing ones point of view and there is no need for smut, racism or four letter words to get ones ideas across. I have seen all of these on the BBS at various times. Debate should stick to issues, not personalities, as is so often the case, if you can't best your opponent then smear him

in order to discredit him is often the way some people debate.

Some have said that RTC should stand for "Restricted To Christians!!" Thanks for the compliment (sic) because if cutting out smut, racism and distastful language is Christian and Censorship, then I'm all for them!

We can debate religion, politics, social issues and any other legitimate subject that one can think of without degrading ourselves with some of the trash I have seen put on our BBS. Some of the writers of this trash are so "Bashful" they won't even sign their proper name but come in on a pseudonym so that we don't know who they are. If they had any intestinal fortitude (guts) that would be the least they could do.

Let's have discussion or debate as the case may be, but in the spirit of common decency and charity with respect for each individual point of view.

Editor's note: The actual fact is that when the TORPET editor was informed that an article critical of RTC's censorship was going to be submitted he visited RTC and informed the management, and all relevant parties there, that he had been told he was going to receive such an article and invited them to prepare response.

Moreover, once the article had been received it was read over the phone to RTC's management by the TORPET editor and also discussed with them by a TORPET reporter before they wrote their response.

The above RTC article was NOT read by the TORPET editor before the accompanying editorial was written. However, it is not the editor's intention to take advantage of his position to have the last word and we certainly intend to publish any rejoinders received.

## CENSORSHIP

### an Editorial

Censorship is a topic that will ring any editor's bell and this editor is no different. The two extreme positions appear to be:

**Pro-censorship:** True freedom comes from private ownership and private property. The man who pays the bill has the right to call the shots. If you don't like it you are free to start your own forum.

**Anti-censorship.** Freedom of speech is one of the most precious rights of man. A bulletin board is a public forum and no one has the right to restrain another's expression.

Lest anyone should think bulletin board censorship is an insignificant issue let them remember that bulletin boards are just now emerging from their embryonic form. Procedures easily es-

established and modified now may quickly become quite rigid through custom.

#### Pro-censorship:

The most avid advocate of free speech will generally draw the line at allowing someone to falsely yell, "Fire" in a crowded theatre. And institutionalized government will always look to its self preservation and close down any advocates of insurrection - "Everybody bring a gun and we will meet at Nathan Phillip's Square at seven", or "All you Boston Indians meet at the Harbor at 11 for a teaparty."

Aside from advocacy of insurrection most liberals would agree that there should be complete and free discussion of ideas. It is often times not content but rather style that becomes the issue. Is removal of profanity censorship?

I am reminded of the story of two telephone linemen that were called into the supervisor's office regarding a customer's complaint that she had heard one of them using profane language beside her house. "No sir," was his reply. "what really happened was that I was holding the ladder and Bill was up at the top putting some molten lead around a connection when he dropped some down the back of my shirt, and I looked up and said, 'My goodness, Bill, you must really be more careful!'"

Given the passion of circumstances or the heatedness of an argument some problems of 'style' such as profanity may creep in. It is one of the functions of an editor to edit them out while preserving the intent of the passage. Given the interactiveness of bulletin boards, they are particularly subject to these problems. A bulletin board is more nearly a 'hot medium' and it needs the coolness of an editor to temperate it.

Pornography is a similar problem of the passions. Those who condone public display of licentiousness often say they are only doing in public what others are doing in private. Yes, that is true, but that is the purpose of bedroom doors. It is also one of the purposes of editors. Pornography is expression whose only purpose is to inflame the passions rather than to enhance reason, and the editor is the door that shields the public from offence.

What is proper and what is not is a matter of social standards but the liberal will always condone a non-impassioned discussion of any subject as long as it is presented in a style of acceptable taste.

There are also bounds of legality. The community as a whole would frown upon a bulletin board becoming a pot exchange or the basic advertising medium for the world's oldest profession. Advertising, as such, whether free or not, has left the realm of the mere discussion of ideas

and since it is again an appeal to action is subject to community standards and lies beyond the standards of protection due to freedom of speech.

Legality also proscribes libel. Character assassination, indeed, specific negative character description of any kind, has little claim of protection in the arena of free speech. It has been said that small minds discuss people, greater minds discuss events, and the greatest minds discuss ideas.

#### Anti-censorship:

Now that we have described those matters that are the proper realm of the censor let us turn to those matters which are not. There are those who are pseudo liberals who would protect us from ideas that they consider harmful. For example two unpopular ideas today with humanist liberals are racism and religion.

Personally, I love a racist bigot. Yes, he is my father. A wonderful man. Honest, hardworking, and has done as much for his son as any father could do. Highly respected too, even by some members of the black race, although his views about blacks and jews are well known. He was a member of the KKK and you may be sure that it was difficult for him to accept that his son had become a community head of the NAACP and taught in black colleges.

I also love a religious bigot. My jewish son who became a priest up in northern Quebec, but completely condoned the forbidding of his father's religion being taught on the Indian reserves.

The point I am trying to make is that we must separate the author from the idea. Any idea, no matter how distasteful it may be to us, should be open to complete discussion. In fact, bringing erroneous, prejudiced and plain stupid ideas out into the light of truth will do more to destroy them than letting them breed in the dark hidden recesses of the bigot's mind.

There are all sorts of bigotry besides racial and religious bigotry. National and economic prejudices are just as prevalent, to name just two others. The electronic forum is an excellent opportunity for their exposure to the light of truth.

It is an editor's task to make sure a forum is open to all viewpoints and to also make sure a rebuttal is made to those viewpoints which he thinks erroneous. Who is to have the final say? There should be no final say in the continuing dialogue on important social issues.

That is not to say that the ideals presented here are always faithfully followed. At one time it was felt that since only the wealthy owned newspapers and radio stations the poor had no opportunity to counteract the wealthy's propaganda. Thus the communists felt they were the ones

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to obtain true freedom of the press in Russia because the press was now owned by 'the people as a whole' rather than being the tool of a favored few.

Knowing the lack of freedom of the press in Russia has reinforced the view in the West that freedom of the press comes from private ownership and private property. But does the one who pays the bill have the right to censor the contents?

The answer is, "No!". The operative word is 'right'. There is often a confusion between legal right and ethical right. In our society an owner of a bulletin board may well have a legal right to censor that board in any way that he wishes, upto and including disbanding it altogether. However, it does not mean that he has the ethical right to prevent the free expression of ideas that he does not like.

This is because the common custom of a free society has determined what are the rules of fair play. We would all resent extensive violations of a 'first come, first served policy' by a merchant, but there is no law stating that he must

follow that practice. Many similar examples could be given. In any sport or game we expect the provider of the equipment to play by the rules just like anyone else. There is nothing to prevent them from taking their ball and going home if we insist that they play by the rules, but we will think them a terribly poor sport if they do so.

The same applies to the operator of a bulletin board. If he is a racial bigot, or a religious bigot, or a humanist liberal bigot, he may not like certain ideas being expressed. But, while he may have a legal right to censor, or even close the bulletin board, he does not have an ethical right to do so simply because he does not like the ideas being expressed.

The electronic bulletin boards present a marvelous opportunity for the rapid exchange of controversial ideas in a free forum. I doubt that you would find many of them in Russia. Neither will we continue to have them here unless we all make a continued effort to make sure the rules of fair play are understood and followed.

## A PET Peeve

### Fuzzy Number by John Ylimaki

Nipigon, Ontario

Like any computer the Pet does not perform arithmetic calculations with absolute precision and one always has to be on the lookout for "Fuzzy Numbers" as Jim Butterfield calls them.

To illustrate, feed these to your PET.

```
PRINT 8.13
PRINT 3.1 - 3.
PRINT 5.27 - 5.18
PRINT SQR(9) - 3

FOR I=0 TO 2 STEP .01: PRINT I: NEXT I

FOR J =2 TO 4 STEP .1 : PRINT J: NEXT J

10FORC=1TO100:A=SQR(C)-INT(SQR(C)):
IF A THEN PRINT C
20 NEXT C
```

As you can see answers are not exactly as expected. It may appear trivial but errors of this sort can be compounded and the final results may be inaccurate. Not only that but tables tend to become very messy.

Fuzzy numbers arise in a number of ways. Most of the time it is because the PET stores numbers and does arithmetic in the binary number system - not the decimal system we use. Every number used must be converted from decimal to binary, and results must then be con-

verted from binary back to decimal. From this, conversion errors arise.

Integers give no problems but certain fractions can not be represented exactly as 9 digit floating binary numbers. You end up with an infinite repeating base two value which gets cut off short by the PET's limited word length.

For example  $1/10 = .00011001100110011\dots$

Herein lies the problem. It keeps repeating (like yesterday's coleslaw).

This is the equivalent of  $1/3 = .3333333333\dots$

In our base 10, using every last digit is not practical, so when you use .1 you are in effect really using a "Fuzzy" .1, something like .0999999996.

"Fuzzy" numbers also result in using many of the built in routines of the PET. For example, the earlier example gave 6 perfect squares between 1 and 100, not 10. Square roots and powers are worked out using logs, so some round-off error is inevitable. Similarly for other PET functions.

For example:  
PRINT (5 (up arrow) 2 =25)  
PRINT (SIN(PI) =0)

Both result in 0 (false). (If you are a little rusty with boolean values, try subtracting the

above values to verify a difference like 5 (up arrow) 2 -25 is not zero.)

#### A PLAN OF ATTACK

Being aware of the dreaded "Fuzzy" number is half the battle. You only have to code to prepare the proper defense. In other words, "Defuzz" as well as "debug" your programs.

Calculators don't have many of these problems. They eliminate a lot of inaccuracy by using BCD. You could use the same BCD (binary coded decimal) to cure the problem on the PET, but you would have to resort to machine language. The humble programmer in BASIC will have to cope. A few suggestions follow.

(1) In making comparisons, especially those involving built in functions like INT or SQR, one can often fudge results. To fix up that earlier program to give all 10 perfect squares, change it

```
10FORC=1TO100:A=ABS(SQR(C)-INT(SQR(C)))
<1E-8: IF A THEN PRINT C
20 NEXT C
```

(2) You may at times try to use fractions like 1/2, 1/4, 1/8, 1/16 etc. because these can be represented exactly in binary, thus avoiding conversion errors.

(3) To work out powers, multiply rather than using exponents. For example 5\*5 is more accurate than 5(uparrow)2.

```
PRINT (5*5 =25) results in -1 (True)
PRINT (5 (up arrow) 2 =25) results in 0 (False)
again subtraction could be used if you wish.
```

(4) In financial programs convert all dollar and cents questions to cents exclusively. See Butterfield's "Financial Fuzzies" in January, 1980 compute or "Commercial Confusion" in best of Transactor, Volume 1.

(5) Butterfield also passed fuzzy numbers as follows.

A) Round your numbers before printing; if possible, round them to integers so that the problem won't sneak back in. For example INT(D\*100+.5) changes dollars and cents to integer cents; the rounding gets rid of any residual error. PRINT INT(O\*100+.5)/100 is more likely to give a correct output than PRINT D.

B) The following program will let you see the exact value of a number in Basic:

```
100 INPUT "NUMBER": N
110 N% =N:N =N%:PRINT N%:".":
120 N =N*10:N% =N:N =N-N%:PRINT[
CHR$(N%+48):
130 IF N0 GOTO 120
140 PRINT: GOTO 100
```

## Other Communication Systems

### by Richard Bradley

From previous articles I have submitted you might think that there is no reason to get a modem unless you want to use Bulletin Boards. This is not at all true.

The most well known and respected information service is COMPUSERVE. Almost any kind of information is available on this system, and if there is some kind of information that is not included, that you feel should be, you can add it yourself.

Up to the minute news can be obtained. This includes actual news, sports, agricultural reports, stock exchanges, and weather from anywhere in the world.

There are also various educational programs available. There are IQ tests, and instructional courses on various things, including learning computer languages.

If you need to be entertained, then the games section may be just what you need to pass the time.

There is also a large FOR SALE section that can include virtually anything.

Another nice feature is the micro computer support section. This section contains helpful information to users of almost all kinds of micros. To be a little more specific, there is a nice Commodore section.

With membership you also receive a 16K block of disk space. If you need more it can be rented at a reasonable rate.

This system sounds big, and it is big. The system can handle 300 or more users signed on from all over North America at once. The system is of course not free, an initial cost of 25 to 30 dollars is charged. After that you pay as you go, 5 dollars U.S. is charged per hour during non-peak hours. Non-peak hours includes evenings, and weekends.

The peak rates are astronomically expensive, so much so that the system is mainly used by the hobbyist during the non-peak times. Accounts can be arranged through all Radio Shack Computer Centers, and hourly rates are charged to most major credit cards.

This system, and others like it are an excellent value, so get hold of a modem and at least give them a try.

# Too Clever for Words

By Jim Butterfield

Toronto

It's a big boost to the ego to be able to write code that works and that nobody else can read. It's bad practice, but often almost irresistible.

Why bad practice? There are several reasons. First, your code may outsmart itself ... it may be so clever that it doesn't work. Let me give you one of my favorites:

```
100 INPUT "TYPE TWO NUMBERS";A,B
110 PRINT (A+B-ABS(A-B))/2
```

Line 110 prints some mathematical computation of A and B. Can you see what it is? It's obscure. It works.

I have used the above type of computation to fit into a function definition (DEF FNA(X) =). The function would be just as good (and a heck of a lot more readable) if I could use an IF .. statement; but you can't do that in a function. So we have an obscure piece of coding.

I'm about to give the coding away ... don't tread on if you want to try to work out for yourself what the function does. I won't tell you how it works ... but all that the complex expression on line 110 does is print the smaller of the two numbers.

Now: is this neat ... or is it just too too clever for words ... or is it really dumb? Depends on your point of view.

When writing an income tax program, I needed to perform this kind of calculation over and over again ("deduct 5% or \$100, whichever is less ...") and I saved myself a lot of coding by going the function definition route. As I pointed out, I couldn't use IF, so the coding was almost forced into the form shown. And I claim that the end result is a lot more readable: you can see these "whichever is less" calculations in the code.

So I can claim that I wasn't just being cutesy. There was a solid reason for that kind of code.

But before we go along this road too far, we'd better stop and ask the question: what's wrong with being cutesy, anyway? It's your

code; you're writing it for your own pleasure; if it works, who's to say that it's not OK? More: if you write really convoluted code, you might get a program that resides in 10% less memory and runs 5% faster.

There are some languages - like APL - that just beg for super clever coding. It's not unusual to hear an APL programmer say to another, "I bet you'll never guess what this line of coding does". Not the whole program ... just a line.

Well...doing your own thing can be fun, of course. And if that's where it ends, go ahead and more power to you. But reflect on some of the following thoughts:

Some people can't read their own handwriting after it gets cold .. and if you code in a cutesy manner, you may not be able to read your own programs three months after you have written them. No problem if your program is a "one-shot" ... but if you need it, and must change it, you can agonize over some super clever code you wrote yourself. It's not uncommon to see a programmer tearing his hair and yelling, "What was I trying to do when I wrote this..." And think how much more difficulty arises if it's someone else's program. As you go through the code, you are not likely to say admiringly, "What a clever program ... it took me three days to sort out what this line does".

Don't let memory and time arguments sway you. Memory is cheap, and computers are plenty fast for

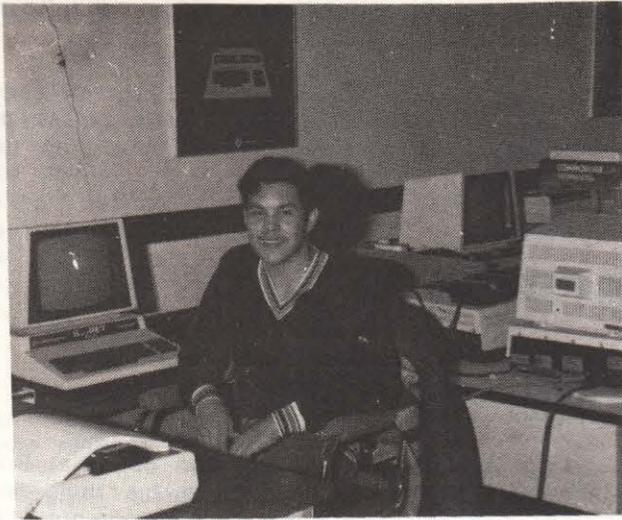
most applications. The days when you had to code super-clever in order to save seven bytes are gone.

But let's make a distinction: there's a difference between clever coding and advanced coding. If you don't know how to use arrays effectively (or don't think of using them) you might write a lot of slow clumsy code. Using good techniques to make your programs more efficient isn't "clever" coding: it's smart coding. You will often profit by learning new ideas, new mathematics: to perform an efficient sort, you'll need to know about the kinds of sorts and the theory that lies behind them.

The main objective is to make your programs logical and readable. Don't let others dazzle you with footwork.

Because clever programs can often outsmart themselves. Under some conditions, the coding given above won't work. Try entering a very large and a very small number and see what happens.

And then decide for yourself what's clever ... and what's smart.



The RTC Basic Aid is a BASIC program development tool which eliminates the problem of having several versions of Basic Aid. It runs on both 40 and 80 column PETs and will work with either a CBM or an ASCII printer. Because RTC Basic Aid is fully relocatable it can be used on 16K or 32K machines.

The RTC Basic aid is a BASIC program development tool for the PET/CBM. It has the following commands:

- Auto** - Automatic line numbers.
- Call** - Load and run a program.
- Case** - Toggle upper/lowercase.
- Catalog** - Display contents of a disk and allows pattern matching.
- Change** - Search and replace a string in a BASIC program.
- Crt** - Dump the screen to a printer.
- Del** - Delete a range of lines from a BASIC program.
- Disk** - Send disk commands and check error channel.
- Dump** - Display the variables defined in the program.
- Find** - Search for a string and print the lines where it occurs.
- Flist** - List a BASIC program from the disk to the screen.
- Get** - Load a program.
- Help** - Highlights areas where error occurred.
- Hex** - Convert decimal, hex, and binary to hex and decimal.
- Kill** - Disable RTC Basic Aid.
- Kprint** - Toggle key print function.
- Merge** - Merge a BASIC program from disk with the one in memory.
- Mon** - Call to the TIM machine language monitor in the PET/CBM.

# RTC BASIC AID

by Troy Hacker

- Move** - Transfer lines of BASIC code to new location.
- Num** - Renumber a BASIC program or part of the program correcting all GOTOs and GOSUBs.
- Old** - Restore program after a NEW.
- Plist** - List BASIC program in memory to a PET or an ASCII printer.
- Read** - Read a sequential file from the disk to the screen.
- Scroll** - Enables/Disables scrolling through text.
- Set** - Setup print type and define the key print character and allowing spaces for structured programs.
- Size** - Display start, size and end address of program in memory or on the disk.
- Spool** - Send a file from the disk directly to a printer.
- Trace** - Traces through a BASIC program step by step, displaying each line as it executed.

All disk based commands (Catalog, Call, Disk, Flist, Merge, Read, Size, and Spool) allow Basic 4.0 syntax.

Example: Call d1."File Name"onu#

In addition to Basic 4.0 syntax, RTC BASIC aid allows file types and line ranges (in some commands).

Example: Merge "File Name" prg  
Merge "File Name".d#.u#.prg  
Merge d#."File Name"onu#.prg.Line Range

The following commands can be paused with the SPACE BAR and stopoed with the RUN/STOP: Catalog, Change, Dump, Find, Flist, Merge, Plist, and Read.

This Basic Aid is aprox. 6K in length. Shorter versions of the aid with the basic editing features will be available on EPROM. A C64 version of memory, will be available shortly.

### Club Tapes

The procedure for ordering club tapes is to send \$12.00 for each disk desired in tape format to:

RTC  
10610 Bayview Plaza, Unit #18  
Richmond Hill, Ontario  
Canada L4C 3N8

Make all cheques or money orders payable to RTC and please include your membership number and return address

Most disks require two tapes and you will receive both tapes for the \$12. For the few disks that will fit on a single tape an additional free tape will be sent.

# MEETING REPORTS

## by John Easton and Dave Simpson

TPUG WEST  
NOVEMBER 1982  
John Easton

Well now, with a bit of a breather between now and the next issue y'rs truly will try to remember what transpired at the November meeting - (perhaps THAT's why you never see a Central Meeting Report - too long between meeting and copy deadline.) Anyhow, now that the Dec. meeting is nearly upon us, I'd best get keyboard in hand and get SOMETHING down here, after all, that's what our esteemed Editor is paying us for - the FACTS (translate that to mean whatever I can remember of whatever impressed (or baffled) me from the meeting). (We would be most happy to pay a regular reporter for reports on meetings anywhere - any or you U.S. clubs listening? -ed)

First impression - that 7PM start time might be a mite presumptuous for the actual commercial operations of the Cafeteria don't close down 'till 7. It get's a wee bit confusing separating cafeteria patrons from TPUG members as meeting time approaches. However, we'll still attempt a 7PM start, especially since Sheridan now want us OUT by 10PM!

Let's see now, once the unruly mob had settled down, what DID we do? Seems to me that Dave Williams started out where he had left off the previous meeting and introduced his latest version of a no-list protection program. This short M/L program (called NO LIST/SAVE on the unofficial club disk) can be loaded in either independently or built in to your program. In operation, through a check on the keyword tokens for LIST, SAVE, DSAVE, or a break to the monitor, will either prompt you with the polite message 'DON'T DO THAT', or jump to a warm start (your option). Now, if one could disable the power on/off switch, we might have the smart kids fooled for a month or so!

Mad Mike Donegan, world-renowned software collector (well, perhaps second only to Peter Spencer or Jeff Kriss) demonstrated some of the intricacies of SYSRES - that commercial version

of BASIC AID from Vancouver. Too bad that Brad Templeton wasn't on hand to do his thing with POWER, sort of an old-fashioned shoot-out, because to the casual observer, though SYSRES undoubtedly has more (pardon the expression) POWER than BASIC AID, it would seem to be very close to Brad's program in capabilities. So you pay's your money (both about the same) and you takes your choice - SYSRES is software based, POWER lives in a chip.

Well folks, we owe you an apology. We promised VIC and COMMODORE 64 demo's but since the promised machinery didn't show up, coffee time arrived with nothing to do but drink coffee. Incidentally, the VIC disk for November (yes, there were TWO disks issued in November) also has an unofficial program added - PET EMULATOR. Load this in to your Commodore 64, set screen colours as desired, run it, and your '64 now thinks it is a PET.

And so, on to something completely new - since Jovial John Stovekin wasn't available for his usual soft-shoe, we were forced to send in a substitute, namely John's employer, Bill McLean from B.M.B. (or C.M.D. or is it THE INFORMATION CONNECTION) in Milton, Bill, with the aid of an associate direct from Paris (France, that is) Pierre Metivier, demonstrated the 'hottest program in Europe next to Visicalc' called simply 'MASTER'. Bill and Pierre have just finished translating the MASTER documentation from French to English - and the whole package should be available from your dealer by the time you read this - cost \$350.00.

So what does it do?? Basically, MASTER is a programmer's utility package to be used in program development and implementation. Yes, there is a run only package to include with your program should you utilise all the whiz-bang stuff that MASTER will allow you to do. MASTER is actually a collection of 4 subsets of different and powerful BASIC add-on routines, allowing the use of some 70 (count 'em - 70) new commands! Only one 'gotcha' - MASTER is configured to run on an 80 column screen (damn! and I just talked

the office into getting a copy, and me with only a 40), either 8032 or 8096.

#### Part 1 - Screen Management

Anything you ever thought you might want to do with a screen seems available through this part of the program. Superior G/X capabilities, line drawing, screen zones (up to 1273 separate zones) definable (either for input or output - complete with the capacity to define allowable input and/or output in these zones), window scrolling, print @, print using, screen save and exchange, ... and on, and on.

#### Part 2 - Printer Format

Once you have defined the screen stuff, you can manipulate the printer output in much the same manner.

#### Part 3 - Utilities Pac.

A whole bunch of good things (remember, this is from memory, and about 2 lines of notes!) seem to have been added to basic, not the least of which is an advanced math package capable of precision up to 22 digits!

#### Part 4 - File Handling

Up to 10 ISAM files may be open at one time. (note how I just drop that in as if it always was that way)

Memory management for extended CBM's allows one to address up to 56K of memory with BASIC, leaving some 26K still free for variables. Want another option - how about up to 16 partitionable areas in memory? Just think, you can let the boss think you're working on HIS program right there in the main 32K he thinks you're using - when all the time you've got the latest version of Cosmic Fighters hiding up there in high memory, next to your own Phone List, next to your Appointment Calendar, next to the secret program you're REALLY working on. (And THAT, dear readers is a dangling participle - see what English 201 can do for a person?) (Ok, I'll leave it this time for the demonstration, but I didn't think you knew. -ed)

And that was about it from the western wilds of Toronto for another month! Good news for VIC/'64 types though. Mark Bell and company have agreed to bring both VIC and Commodore '64 equipment to future meetings. We'll work demonstrations in as best we can throughout the course of any meeting - but definately in coffee break. Mark and friends will be near the keyboards to discuss problems and programs with all and sundry.

TPUG WEST  
December 22nd '1982  
report by John Easton

And my wife thought this meeting would be a wipeout - HA! Why who in his (you note the subtle reference to HIS?) right mind would venture

out on such a miserable night just before Christmas to swap rumors and tales of derring-do with fellow idiots at a virtually deserted college when all that last-minute shopping and housecleaning needed to be done? Well, some 100 or so (forgot to count) idiots did just that and were rewarded with what turned out to be a very informative evening. (Quiet woman, wasn't that new chip just what you wanted for Christmas? Oh well, the house got cleaned didn't it?)

And so, to the meeting. Dave Williams began with a demonstration of two 'unofficial' programs on this month's disk. Note to Dave Hook, sorry about that, but somehow the copy-all program went missing from this month's disk and in it's place appeared two M/L utilities and accompanying demo programs. PAGEFLIP allows one to produce the appearance of motion by quickly printing stored arrays to the screen. Takes a while to set up but once it's done it's memory work, all proceeds as planned. FIND STRING (from December '82 Microcomputer Printout) does a similar job to Bill McLean's BMB STRINGTHING but does it in something like 232 (relocatable) bytes of memory. But what does it do? Like the title implies, it allows you to look quickly through an array to find a match to any specific string of characters.

While he was at it, Dave started us on to what will be a mini-presentation at following meetings (ready for this Dave ?), an introduction to quick utilitarian use of the M/L Monitor. You've forgotten the SYS to re-set your machine, that sys 60000 something or other? No problem, just get into the Monitor (SYS 4) and look at the 3rd and 4th last piece of code in memory, - .M FFF0 FFFF will get you the last 8, of which FFFC and FFFD are the key locations. Now, still in the Monitor, enter .G (for GOTO) whatever was at FFFD and whatever was at FFFC (remember Hi-byte, Lo-byte are reversed), for instance, for your average 9" 4032 this will work out to .G FD16. With that bit of legerdemain, your PET will quietly re-set itself and sit there blinking it's friendly startup message. See how easy it is to dazzle your friends?

At about this time Jim Butterfield jumped into the fray (what IS that really - a mnemonic for frozen sleigh?) to point out that this routine works on about 95% of ALL 6502 processors. Actually, it works for 100%, but the remaining 5% you will probably have set something where it shouldn't be and could encounter slight difficulty. Anyhow, should you still feel queezy playing with all that HEX stuff, Jim suggested a simple alternative, just SYS (PEEK(65532)+PEEK(65533\*256)) which gets you to the same place. But remember, all this exercise started because we couldn't remember ONE number - this is a solution??

So where were we, Jim Butterfield, and did anyone stay up to hear Jim on the Radio phone-in show after the Central meeting? Y'rs truly stayed up long enough to put a tape on Record, then as Jim predicted, managed to quickly fall asleep. Seriously though Jim, you have a unique knack of answering even the dumbest questions steering clear of controversy and rumor - a real gift that we all appreciate.

Jim's presentation was a repeat of that shown earlier this fall at the Central meeting, wherein he demonstrated the difference between similar programs written in BASIC (and thus Interpreted), COMPILED Basic (both DTL and PetSpeed) and pure MACHINE CODE. This demo program (the M/L part) incidentally is part of an upcoming release from Professional Software to be called something like WordSpell (obviously a spelling checker - or Professional's answer to Steve Punter). Anyhow, let's compare the programs, both the Basic and M/L versions occupied 6 blocks, the DTL Compiled version occupied 21 Blocks, while the PetSpeed version grew to a gigantic 59 Blocks long!

So, how about speed of operation? The programs all did the same thing, scanned a bit of sample text, and on reaching the end of a word (locating a space) printed the word to the screen. Nothing earth-shattering in this, and one could virtually picture the program getting, character by character, the words of text, happily building up the next word, then triumphantly displaying what it had done for all the world to see - at least in the basic version (why the computer even paused for applause between each word!). So, on to the Compiled versions - and we ran into the first snag of the evening, DONGLES. A POX on Dongles !! So we couldn't see the DTL version run because we couldn't find any place on the Video Interface to plug in the necessary dongle. (Excuse me a minute.)

No dear, a dongle is that tiny piece of Manufacturer's magic that 'protects' their product from illegal use - it is supposed to plug into the Casette Port and from then on everything runs as advertised. Great if you have a Casette Port and haven't yet lost your Dongle, or don't mind paying something like \$50.00 for an extra one! Mr. Manufacturer, if I have an application where I really want this extra protection, I (or my client) will gladly pay for it, but in the meanwhile I won't use your product 'till such time as I can deliver a finished program to a client that runs as-is without any fancy 'protection' - good heavens, Compiling in itself is (for the moment) quite enough protection for me thank you.

The PetSpeed Compiled version certainly made a difference in operating speed - no time at all for applause between words. Just to keep the comparisons in perspective, let's say the Basic

version allowed something like four claps between words on average. As I recall from the previous demonstration, the DTL version allowed perhaps one clap between words. And so to the M/L version - well my son, I blinked and missed the whole thing (well, not REALLY, but I could have!). So there you have it, the poor man's unscientific (but practical) comparison test. Jim concluded with a summary of the advantages of Compiling your programs (should you not yet feel up to pure Machine Language) provided you can afford the luxury of all that extra code in memory (and from a Basic Code of some 50 blocks and upwards, you actually gain memory):

- 1) You can expect a useable speed increase in program execution in the magnitude of perhaps 3 to 20 - depending on routines being performed and the characteristics of your particular Compiler.
- 2) You are afforded some measure of Code Protection, being in the form of pseudo Machine Language, it's rather difficult to disassemble (for me, it's impossible, and Butterfield isn't telling).
- 3) If for nothing else, you might consider a Compiler to check your Basic Code. During the course of it's multiple passes through your Basic Code while in the process of building up the Compiled Code, a Compiler actually checks ALL your code for logic and accuracy. Should you have any wee bugs lurking there, our friendly Compiler will quickly point out to you the error of your ways.

And now for something completely different. Jim demonstrated the latest whiz-bang game COSMIC FIGHTER (on the December Disk) the author of which he has attempted unsuccessfully to track down somewhere in West Germany. For sound and fury, it certainly ranks right up there with the best and, Jim tells us, there are five different screens of increasing difficulty should you survive that long (me, I haven't yet reached the third one!!).

Oh, Jim did play a bit with some Commodore 64 demonstration stuff (YES we had both a '64 and VIC on hand for you technicolour fans). For those who might like to play with the resident Basic of the '64, try the following :

```
FOR J=40968 TO 49151:POKE J,PEEK(J):NEXT
```

This will poke Basic from it's resident ROM location to the RAM which is resident at the same locations (just hiding there under the ROM).

Now POKE 1,54 to remove the ROM and you can play with it's image to your heart's content. POKE 1,55 to return to normal operation.

And so to muffins (thank you Doug) and coffee and Rumors. Chris Bennett suggests we might expect to see some of the following goodies from the Commodore in the next while (or decade, whichever comes first). How about a MUSIC KEYBOARD - you know, like Yamaha, just plug her in to your '64 and play on, Beethoven! (with apologies to Al Lowe). Rumours of a re-

placement for the departed single-disk drive (the 2031) - and we've now heard from several sources of the possibility of a PORTABLE CBM, in the manner of the Osborne, that is. Chris also made mumblings through his muffin about a new IEEE MODEM (perhaps two) and the possibility of a new GRAPHICS PRINTER with Colour Capability - why Chris, that happens with mine now, anytime the kids are around with their ice-cream and peanut-butter fingers!

A general bull-session, question and answer stuff (a feature we hope to continue) ate up most of the remaining time while John Stovekin of BMB fame managed to arrange enough cables and disk to power up his whatchamacallit PET, something more than an 8096, yet slightly less than a 370. You see, there's this mess of boards inside, first there is the normal 96K expansion board, then the Z-80 powered Z-RAM board (running at 4 meg.) topped off with a DTAK Motorola 68000 board (yes, John finally found somewhere to park that 68000). Closing the lid with a shoehorn, John set about to tell us of the magic of this 16-bit (pseudo 32-bit) processor. Running at a speed of some 8 megahertz, this little gem has the capability of addressing some 16.7 megabytes of memory (see what I mean about the shoehorn?), and that rather quickly. By way of a demonstration of it's speed, John ran a rather complicated sin/log (is there such an animal?) sort of formula through both the 6502 and the 6800. Naturally the 68000 won - 10.75 seconds as compared with 38 seconds and most of that time was spent printing to the screen - the actual processing time was something like 2.75 seconds. Before you run right out to buy one of these little marvels though, if it's just speed in mathematics you want, John had to admit that in addition and subtraction, the 6502 was just a wee touch faster - suppose all that extra smart memory just gets in the way.

And so, with John giving a pitch for his favourite rumour-sheet (coincidentally published by DTAK), the sounds of C-64 Christmas music rise in the background, the lights dim (like they PULL THE PLUG at 10 PM), and another year is through for the night! Thanks to all who have joined in to make these West End Meetings just about the friendliest place in town on a Wednesday night (even though it is just before Christmas). To Doug Vowles and Ted Bangay from Sheridan, who have always managed to get us Somewhere to meet, equipment to wreck, and MUFFINS to eat - To the zillion helpers that appear (and hardly ever disappear 'till all the equipment is safely stored) to aid in the setup and copying chores - to all those who travel miles, give up flying lessons, or an extra night at the keyboard (or typesetter - mustn't forget Carl Hildon) to assist by sharing their knowledge in demonstration or freely offered advice and solutions to the myriad of questions our varied membership are encouraged to ask. So thanks to you all - John, Dave, Bill, Jim, Al, Mike, (say Mister Editor, how far to the end of this page?).

Cris, Muriel, Rover (that's my cat - wouldn't want to forget HIM, and if Butterfield can do it, so will we), Brad, whoops, almost forgot Steve, but then he's so small it's sometimes hard to hear his comments over the crowd - anyhow, it's been a good year so far, and with all your help will only get better. Don't forget - next meeting is on the 3rd THURSDAY in January, the 20th, in the cafeteria of Sheridan College at 7 PM.

## VIC INTEREST GROUP

Central Meeting  
December 15, 1982  
by Dave Simpson

Once again it was standing room only at the Central meeting. There is still talk of finding a larger space, but as yet nothing has been worked out. Some members have suggested that the VIC Group meet separately either at Leaside High (if this can be arranged) or at some other convenient venue. This would allow more time for VIC stuff and make for an earlier evening for the folks that travel long distances to attend. We had members from as far away as Kitchener this session. Let me have your comments on this. (The TPUG executive is about to make some major decisions in this area. -ed).

Mike Liotta got the session going with a demonstration of his adaptation of a tape-to-disk and disk-to-tape program that our VIC librarian will find very useful. Using this program it is possible to copy to tape, for example, selected programs on the disk. Once the programs have been selected from the disk directory you can go off and watch hockey, or whatever, while your selection is loaded into the VIC and saved on the tape.

Mike also demonstrated a debugged version of the Hires Hardcopy program in the VIC printer user manual. Unfortunately some of the bugs had crept back into the version Mike was using at the meeting. However, we were able to see work that was done with this program and Mike will be demonstrating the final version at our January meeting. Both of these programs will be available on the next VIC Group tape which we expect to issue at the February meeting.

Fred Brown showed us a double-up mother board that he made. This board allows the use of two cartridges at the same time. This offers a low cost means of adding memory to your VIC and makes it unlikely that you will overload the power supply as only two slots are available. Fred has offered to make his technique available to club members and will make up these boards to

- Guessing Game
- Word Hunt 8k
- VIC Tape Index
- VIC Keysort
- Vic Sort.Demo1
- Vic Sort.Demo2
- VIC Jasper SX
- VIC Colour Roos SX
- VIC Pooky SX
- VIC Garfield SX
- Demo.Hi SX
- VIC Trshy Pic SX
- VIC Design SX
- VIC Design 2 SX
- VIC Design 3 SX
- VIC Design 4 SX
- VIC VIC
- Digiclock
- VIC Aid4. Rel
- VICMusic\$1201
- V 76 Trombones
- V Entertainer
- V Wonderland
- Outpost-Load
- Outpost
- Data File
- Read File
- Find File

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order for \$20.00. Fred - I didn't get your address at the meeting! Please let me have it and I'll pass on any enquiries that I get.

We discussed the beginner's nightmare - What happens when memory expansion greater than 3k is plugged in?". "My program won't run", etc. etc. The problem lies in the fact that top of memory on the standard VIC is used for the screen memory. The 3k expander fills an empty memory space 'under' the memory supplied with the VIC. If additional memory is added it has to go 'above' the existing memory. To do this the VIC relocates the screen memory to the bottom of available RAM! Now you have the original RAM with 8k or more sitting as a continuous block of memory 'above' screen memory.

If you try to load an 8k program into the standard VIC you will eventually see garbage on the screen. This is the program which is now loading into screen memory and the VIC is trying to make sense of it on the screen. Another problem to look out for is that overflow from the screen will land in your program if you are using an 8k or more expander. You should always check that the value of any POKE's to screen memory is not greater than the last position of screen memory.(4607)

One way that you can set up a program to run a VIC with any memory set up is to put these lines at the beginning of your program:

```
10REMSC-STARTOFSCREENMEMORY:CL
=START OF COLOUR MEMORY
20SC=PEEK(648)*256:REMFINDSTARTOF
SCREEN MEMORY I.E.
TOP L.H. CORNER OF SCREEN
30CL=38400:REMSTARTOFCOLOURMEMORY
FOR STD VIC
40IFSCI7680THENCL=37888:REMRELOCATE
COLOUR FOR VIC + 8K/16K
```

We wrapped up the meeting with a question and answer session with a lot of discussion on how best to get existing programs to run on all versions of the VIC if the screen and colour location have been called up by location each time they are needed. Apparently a program exists that will search through a listing and relocate all screen and colour memory locations to suit the required memory set up. We are hoping to have this program demonstrated at the next meeting and on the next VIC Group tape.

#### VIC Odds and Ends by Dave Simpson

We have finally found someone who will make translations of the dutch programs that many of you have on TPUG disks and tapes. These will be on the tape that we intend to release in February. Remember that we can only put out tapes as we receive programs - so keep those programs coming in.

Send your VIC articles, reviews, and programs to:

Dave Simpson  
141 Yorkview Drive  
North York, Ont., M2R 1K2

Include your name and address and I'll return the tape(s).

Mailorder December/82 tapes are available from Software House, 309-4630 Dufferin St. Toronto, Ont. at \$6.00 each. Copies of this tape and all TPUG programs can be picked up from Electronics 2001, 5529 Yonge Street and RTC Telecommunications 10610 Bayview Ave., Richmond Hill.

## VIC Switch by Jerry Persall

Columbia, Maryland

Before setting down to some serious computing on your VIC-20 one first has to power up, i.e. turn the VIC on. This has always involved first plugging in the power supply to a wall receptacle and flicking the power switch on the side of the VIC itself.

The first of these chores, plugging into an outlet, has always involved, for me, crawling under a nearby desk to reach for the nearest receptacle. (Note: Leaving the power transformer always plugged and "on" is not a good idea!)

One solution is to install a feed-through cord switch (available in most any good hardware store; mine cost \$2.29 U.S.) close to the power supply itself. The power cord can now remain permanently plugged in.

Powering up now involves simply flicking the newly installed in-line switch and turning on the VIC switch. Try it for a new switch on things!

Central Meeting - January 12, 1982

Again our attendance was fantastic. My apologies to the folks that had to sit on the floor or stand for the duration of the meeting. We have tentatively decided to schedule a separate VIC group meeting for March. This will give us some time to get things organised. We are suggesting that the February meeting will be held at Leaside High on the same night as the general TPUG meeting, but start at 7.30 as a separate meeting. This will give us plenty of time to have an interesting meeting and allow for a gab session after the formal meeting is over. Check at Room 227

when you arrive. The location of the March VIC group meeting has not been settled, but it is unlikely that it will be at Leaside High.

Although a number of programmes have been submitted, a January tape has not been issued. These programmes and what we obtain before the next meeting will be issued on the February tape. Things are looking good for our Group tape issues. We have been offered the programmes issued by a US public domain source of programmes that one of our members subscribes to. This could be up to 100 programmes - or more!!!. Keep those programmes coming in. We are building quite a library.

We are still hoping to receive the programme that will change screen memory locations to suit a required VIC memory set up. Another way that a programme can be set up to run on any memory size is to put these lines at the beginning of the programme:

```
10 SC = 4*(PEEK(36866) AND 128) +  
64*(PEEK(36869) AND 112)  
20 CL =37888 + 4*(PEEK(36866) AND 128)
```

Remember that SC is the start screen memory and CL is the start of colour memory. All references to screen and colour locations should now be relative to these start positions i.e. S =SC + 22\*Y + X etc.

The first demonstration of the evening was a very impressive turtle graphics interpreter being developed by Paul & Danny Shields. This is a high resolution turtle graphics programme. (Eat your heart out HES!) Paul showed us how the programme can be directed to draw various shapes using very simple commands. All the VIC screen editing features are retained making the programme very easy to use. As this is the first release of the programme it does not have a complete set of commands. However, we understand that the intent is to develop this into a complete turtle graphics package. Paul has donated the present version to the VIC group. Look for it on the February tape.

We then had a demonstrator of the VIC Rabbit. The version used was on tape and unfortunately is no longer available in this form. The supplier, Eastern House Software, has taken the tape version off the market and replaced it with a ROM version. The disadvantage of the tape Rabbit is that it is system specific. That means that it will only run on one version of the VIC. The version demonstrated, for example, will only run on an 8k VIC. The ROM Rabbit, however will operate with any VIC and plugs into the expansion port and has a piggy back port that allows expansion, game cartridges, etc to be plugged into the back of the Rabbit. In the demonstration a 6k word processor programme was loaded in just under two minutes. Using the Rabbit it was possible to load the same programme in about 30 seconds.

Quite a time saving! The Rabbit will also do hex to dec and dec to hex conversion, memory tests, and a number of other things. See last months Torpet for a detailed review.

There is a lot of interest in the use of modems with the VIC. Paul Loughheed showed us the Midwest Micro terminal software. The big feature of this package is that it converts the VIC into a 40 column screen. Unfortunately it will only do this when acting as a terminal! Paul was able to show us a simulated message that was repeated to the screen on command. This showed us the very smooth scrolling capabilities of the programme. Pixel by pixel!

There is a lot of talk of setting up a VIC bulletin board. Judging from the interest at the meeting it should be possible to make this worthwhile. Maybe one of the modem people would undertake setting up a VIC BBS on behalf of the Group. It would also be interesting for those of us without modems to see this system in use. Would it be possible to hook up a demo at a future meeting? (Could a remote phone hookup be used?) I'd like to hear from anyone prepared to look into these ideas.

Wilf Steimle is offering an acoustic modem complete with all necessary software and hardware to run on a standard VIC. Anyone interested should give Wilf a call at 630-8660. A PET version is also available.

Plan on attending the February meeting - we will have a lot of good things. Dave Ayotte will be showing us how to make an inexpensive light pen and will demonstrate its use, and we're hoping that Dave Berezowski of Commodore will be able to give us a talk on various aspects of using the VIC. Don't forget that it's your input that we need to keep the meetings interesting.

#### Odds and Ends

One of our members, Chris Lang, has been in touch with a number of VIC groups across the world suggesting a programme exchange. To date we have had one reply from a group in Illinois offering to exchange programmes with us. We will be looking into this.

We had a query last month from a member in the Montreal area asking whether it is possible to connect an EXTEL teleprinter to the VIC. Our experts tell us that it can be done using an RS-232 interface. "VIC Communications: The RS-323 interface", Compute! August, 1982, pp99 gives details and instructions on how to make an interface.

Our members have been invited by the VIC Users Club in Kingston, Ont to attend their meetings if in the area. Their next meeting is January 262, 1983 at Loyalist College, Kent Building, Room 2L3. Rob Nelson extended the invitation.

TL - OCT/82  
NOTES ON THE  
OCTOBER TPUG DISK

SUMMARY by GERRY GOLD

10	COPY-ALL	Disk to disk copy - all files. Selects before formatting
61	HOLYHALTER 2	Computer art. Rotating cylinders: 40 / 80 column display
17	TERMINAL.SERIAL	Terminal program for VIC (I)
7	TERM.SERIAL	Terminal program for VIC (II)
6	VIC KEYSORT	VIC version of Strasma's KEYSORT sorting program
3	VIC SORT.DEMO1	Sort demo for VIC KEYSORT
6	VIC SORT.DEMO2	Sort demo for the VIC KEYSORT
1	RELREAD	Reads a relative files, accessing records by #.
5	SOUP	Compares load addresses of 2 sequential files.
9	SPACEWAR 1	Defend the galaxy fom alien ships. Load this program first.
10	SPACEWAR 2	Load this program after SPACEWAR 1. Then RUN.
10	VIC JASPER	Reknown bear. Hi-res demo (requires VIC Super Expander)
6	VIC COLOR ROOS	Kangaroo and baby from SuperExpander Instructions. Colour.
6	VIC POOKY	Garfield's buddy. Hi-res demo (requires VIC Super Expander)
13	VIC GARFIELD	Full color feline. Hi-res demo(requires VIC Super Expander)
2	DEMONSTRATIE.HI	Dazzling! Hi-res demo (requires VIC Super Expander)
2	VIC TRSHY PIC	Orbs! Hi-res demo (requires VIC Super Expander)
1	VIC DESIGN	Hi-res computer graphic art (Super Expander)
1	VIC DESIGN 2	Hi-res computer graphic art (Super Expander)
1	VIC DESIGN 3	Hi-res computer graphic art (Super Expander)
1	VIC DESIGN 4	Hi-res computer graphic art (Super Expander)
6	VIC VIC	Expanding squares and VIC logo.
4	DIGICLOCK	Larger than life digital clock (In Dutch). Seconds Tick.
4	HIRESFOURIER	Hi-res times plot (In Dutch).
12	USA SONG	Music for the VIC.
15	SWAP 16/32K	Alphabetize a list of words (age 7-8)
15	SWAP 8K	Alphabetize a list of words (age 7-8)
20	MOCKINGBIRD HILL	Song with graphics in CB-2 sound (PET 40 col)
25	FINANCE 1.1	Bus. Utilities:future value, depreciation, loan calc.
7	GASSER	What you pay when gas goes up (miles and gallons!)
76	TIMETABLE(8032)	80 column course scheduling utility.
26	MUSIC LESSON	Android teaches you musical notation.
25	MUSIC LESSON 2	Loads from "MUSIC LESSON" then tests your knowledge.
40	ELEMENT QUIZZ	Learn your elements chemistry buffs!
80	ELEMENT QUIZZ	More skill testing questions on elements.
7	VIC AID4.REL	Adaptation of TINY AID and BASIC AID for the VIC (D. Hook)
9	VIC MUSIC\$1201	4 part music driver-req. digital-analog board in users port
10	V 76TROMBONES	4 part music - requires driver program and board.
9	V ENTERTAINER	4 part music - requires driver program and board.
4	V WONDERLAND	4 part music - requires driver program and board.
3	STRING THING	64 Input routine for strings from disk
7	BRKOUT.PADL	Jim Butterfield's dazzling VIC BREAKOUT game.
10	MEMORY CHART	Memory chart for the Commdore 64.
10	COPY-ALL 64	COPY-ALL for the Commodore 64
29	NOS TRANSLATOR3	Dutch program translates BASIC programs. Hardware mod.

TN - NOV/82  
NOTES ON THE NOVEMBER TPUG DISK

SUMMARY by GERRY GOLD

10	COPY-ALL	Disk to disk copy - all files Selects before formatting
36	INSTRUCTIONS	Instructions for PILOT programming language
13	PILOT TRANSLATOR	PILOT programming language for the PET See "INSTRUCTIONS"
17	WATERMELON PET	eats a watermelon Spit out the seeds Kids love it
16	FOOD PET	'pigs out' & pops pills for junk food Kids love it
26	MAGIC SQUARE	Configure and number the cells in a square Good for kids
42	SPREAD SHEET	40T Public domain numerical spread sheet - 40 col
8	PRINT USING&TEST	Machine language print using function - Instructions

21	WATCHMAN-40	Walk the Streets of 3 Swedish cities Do not retrace steps
55	SPREADSHEET80DT	Public domain numerical spread sheet - 80 col
1	PRINT USING ML	Print using function(see PRINT USING&TEST)
31	SCREEN ROUTINES	Demonstrates scrolling and window routines Instructions
19	BAS&ML COMBINER	Utility for PAL assembler: mix BASIC with assembler code
58	QUIET AFTERNOON PET	animation demo (also 64) The perils of a quiet pm
42	Q-BACK CHALLENGE	Be a quarterback (1 or 2 players) for live action football
20	PIZZA	Children's game (7-12) Deliver Pizza to correct 'address'
51	CLASS ORGANIZER	Manages class list, grades and relative weighting of grades
1	CM-CSP403	Sample files for CLASS ORGANIZER
1	CN-CSP403	Sample file for CLASS ORGANIZER
32	CHEMDRILL1	Chemistry review questions
33	CHEMDRILL2	Chemistry review questions
32	BACKUPDRILL1	Chemistry review questions
33	BACKUPDRILL1	Chemistry review questions
46	MULTI-INVADERS	Menu-driven Includes hoser and invisible invaders

## New Disk Releases

### Disk Bull

David Williams reviews the current TPUG disk on the TPUG bulletin board.

#### TJ JUN/82

COPY/ALL  
 FILE RETRIEVER  
 5TH SCOTTE.INST  
 5TH SCOTTE  
 TEDDY-APRIL82  
 DAISY-APRIL82  
 TEDDY.INSTR  
 DAISY.INSTR  
 TINY FORTH NOTES  
 TINY 4TH TCHR4.0  
 TINY.PILOT.INSTR  
 TINY.PILOT.OBJ  
 TEDDY.RENUM  
 -DAVE WILLIAMS--  
 DOUBLEPROG REL  
 ML STOPKEY  
 SEQ->PRG/MERGE  
 DYNALOGIC  
 FUNCTION GRAPH  
 EQUATION SOLVER  
 COMPUTATE  
 STRUCTURE BASIC  
 RELATION SKETCH  
 RELATION GRAPH  
 -----  
 lister (SuperPET)  
 PHONE NUMBERS  
 TAPE PHONO-PHILE  
 DISK PHONO-PHILE  
 TABLE MATH  
 DATA GENERATOR  
 disklist.apl (SuperPET)

#### TK - SEPT/82

-BASIC 4.0 F40-

INVADERS 4.0  
 FAST INVADRS 4.0  
 ACROBAT F40  
 CAR RACE F40  
 MISSION IMP F40  
 NIGHT DRIVER F40  
 BACKGAMMON F40  
 --- SEPT 82 ---  
 DISK MASTER V2  
 5TH SCOTTE.INST  
 5TH SCOTTE  
 STRING THING  
 TAPE PHONO-PHILE  
 DISK PHONO-PHILE  
 PHONE NUMBERS  
 VIC TAPE INDEX  
 MASTER TAPE LIBR  
 WWV  
 WWVI  
 WWVII  
 WWVIII  
 WWIX  
 WW WORD LIST  
 CMPR MOSER SRCE  
 STRING THING 64  
 SUPERSPEED SORT  
 MARKSCALER  
 FIXFILE  
 POINTER SORT  
 FILE  
 ML DATA MAKER  
 WWI  
 WWII  
 WWIII  
 WWIV  
 SUPERMON64.V1  
 COMM64

#### TL - OCT/82

COPY-ALL  
 HOLYHALTER 2  
 TERMINAL.SERIAL  
 TERM.SERIAL  
 VIC KEYSORT  
 VIC SORT.DEMO1  
 VIC SORT.DEMO2  
 RELREAD  
 SOUP  
 SPACEWAR 1  
 SPACEWAR 2  
 VIC JASPER  
 VIC COLOR ROOS  
 VIC POOKY  
 VIC GARFIELD  
 DEMONSTRATIE.HI  
 VIC TRSHY PIC  
 VIC DESIGN  
 VIC DESIGN 2  
 VIC DESIGN 3  
 VIC DESIGN 4  
 VIC VIC  
 DIGICLOCK  
 HIRESFURIER  
 USA SONG  
 SWAP 16/32K  
 SWAP 8K  
 MOCKINGBIRD HILL  
 FINANCE 1.4  
 GASSER  
 TIMETABLE(8032)  
 BUTTERFIELD  
 MUSIC LESSON  
 MUSIC LESSON 2

40 ELEMENT QUIZZ  
 80 ELEMENT QUIZZ  
 VIC AID4.REL  
 VICMUSIC\$1201  
 V 76TROMBONES  
 V ENTERTAINER  
 V WONDERLAND  
 STRING THING 64  
 BRKOUT.PADL  
 64 MEMORY CHART  
 COPY-ALL64  
 NOS TRANSLATOR3

#### TM - NOV/82 (PET)

COPY-ALL  
 INSTRUCTIONS  
 PILOT TRANSLATOR  
 WATERMELON  
 FOOD  
 MAGIC SQUARE  
 SPREAD SHEET 40T  
 PRINT USING  
 PRINT USING&TEST  
 WATCHMAN-40  
 SPREAD SHEET80DT  
 PRNT USING ML  
 SCREEN ROUTINES  
 BAS&ML COMBINER  
 QUIET AFTERNOON  
 Q-BACK CHALLENGE  
 PIZZA  
 CLASS ORGANIZER  
 CM-CSP403  
 CN-CSP403

CH-CSP403  
CHEMDRILL2  
CHEMDRILL1  
BACKUPDRILL2  
BACKUPDRILL1  
MULTI-INVADERS!

**TN - NOV/82 (VIC)**

COPY-ALL  
MINIATURE GOLF  
TANK VS UFO JOY  
TANK VS UFO KEY  
SHOOTER JOY  
VIC CHASE JOY  
VIC CHASE KEY  
BREAKOUT KEY  
STEAL MONEY  
PING-PONG  
SUPEREVERSE VIC  
VIC 3 OF KIND  
WALL DESTROY VIC  
CHUCKALUCK VIC  
LETTERSQUARES  
VIC SQUIGGLE  
SLO VICMAN KEYB  
MASTERMIND  
CRAZY BALLOON  
ALIEN WASTER  
ASTEROIDS  
VIC MAIL  
OUTPOST  
BUDGET  
SEPT 30 RANDOM  
WORDPRO 2  
VICTERM  
CAT  
WIZZACALC  
DISKMEM B-RR1  
DISKMEM INSTR.  
VICWORD  
VIC CONTROL KYBD  
VIC TRIANGULATOR  
JOYSTICK TEST

**TP - DEC/82**

COPY-ALL  
COSMIC FIGHTER  
MUSIC INSTR  
FRERE JACQUES  
YANKEE DOODLE  
CHRISTMAS  
CHRISTMASMUSIC  
CHRISTMASCODE  
CHRISTMASROOT  
KEYBOARD RECORD  
NEW ROM MUSIC  
OLD ROM MUSIC  
76 TROMBONES  
JINGLE BELLS  
TEN XMAS SNGS  
JINGLE2  
BOOT  
CHG LD ADDR V1.2  
HEX DUMPER 80

FACE INSTRUC  
FACE LOADER  
FACE OBJ  
FACE DRIVER  
PEDIGREE CHARTS  
MOVABLE FEASTS  
DRAGON  
DRAGON DRUGGIN  
VECTORS  
BIT MAP PLOT 64  
BUGS 64  
SPRITE MAKER 64  
PI HUNT 64  
PI HUNT 64.2  
MULTI-DICE  
FIZZBIN  
FIZZBIN 8K RULES  
FIZZBIN 8K GAME  
SPET 8050-2031  
BANK SELECT 6502  
PPOINT COMMUN.

**TQ - JAN/83**

PUKMAN  
STAR SYSTEM  
N.Z. QUIZ  
WARLORDS INSTR  
WARLORDS GAME  
BLOCKADE  
ALIEN BLASTER  
OUTPOST-ML3  
OUTPOST  
TOLL BRIDGES  
EAR  
EYE  
REACTION  
HIGH Q  
MINEFIELD 2  
STAR LANES  
WORD-SEARCH  
TV SATELLITES  
BILLBOARD  
V JIM IN COLOUR  
VIC LOTTARIO  
VIC REL WRITE  
VIC PRG CHARS  
V CHARS@S1C00  
VIC FUNCTION KEY  
VIC ZIG ZAG  
V ADDITION PRACT  
V MULTIPLY PRACT  
V SUBTRACT PRACT  
V ADDRESS FILE  
VIC GRAPH PLOT  
VIC UXB 1  
VIC UXB 2  
V BACKGAMMON  
VIC-POLY-TURL  
V ZAP  
VIC CHECKBOOK  
V MAILING EDITOR  
V COMPLEX MATRIX  
V 555 TIMER  
VIC FINANCE  
V LO PASS FILTER

VIC FREE-FALL  
C64 PET SCREEN  
COL.PICT.BOOT  
DIANE.C64  
DIANE.CDATA  
VISIBLE PET  
VISIBLE VIC  
VISIBLE C64  
FACTORS.PET  
FACTORS.VIC64  
CONTEXT INDEXER

**L3 - TPUG-LANGUAGE 3**

LOADER FORTH  
FORTH DISKO  
FORTH H75.6

**S1 - MUSIC 1**

UNIVERSAL WEDGE  
COPY ALL  
NEW ROM MUSIC  
OLD ROM MUSIC  
76 TROMBONES  
1950'S MEDLEY  
ALLELUJAH  
BAMBOO TREE  
BARCAROLLE  
BAROQUE FANFARE  
BLACKBIRD  
BUMBLE BEE  
CANDY FAIRY  
COME SW DEATH  
DANSE CAPRICE  
DUELIN BANJOS  
EASY WINNERS  
ELEANOR RIGBY  
ELEPHANT  
ENDLESS SCALE  
ESPANA  
FIDDLER  
FUGHETTA  
FUR ELISE  
GAVOTTE&MUSSETTE  
INVENTION #4  
INVENTION #5  
INVENTION #8  
INVENTION #11  
INVENTION #14  
JESU/JOY  
JET PLANE  
JINGLE BELLS  
LE TAMBOURIN  
LOVE STORY  
MAPLE LEAF  
MARCHE MILITAIRE  
MIN.IN D  
MINUTE WALTZ  
MNT.GREENERY  
MUSSETTE  
MUSIC BOX DANCER  
OB-LA-DI  
OCTOPUS  
ORGAN FUGUE  
PALINDROME

POLONAISE IN BFL  
PRELUDE&FUGUE  
PRISCILLA  
PROMENADE  
REED FLUTES  
REEL  
RICH MAN  
SILENCE  
SINFONIA  
SINFONIA #1  
SINFONIA #2  
SINFONIA #3  
SINFONIA #10  
SINFONIA B FL  
SKELETON DNCE  
SONATA L.82  
SONATA RONDO  
SONATINA  
SPINNING SONG  
SPRING SONG  
STAIRWAY  
STARSPGL BANNER  
SYNC. CLOCK  
TARENTELLA  
TEN XMAS SNGS  
THE ENTERTAINER  
THREE TUNES  
TWO GUITARS  
VALSE TRISTE  
WATER MUSIC  
WEE MAN  
WELL TEMPERED  
WELLS FARGO  
WHEN I'M 64  
WONDERLAND  
YAKKITY SAX  
YELLOW SUB  
YESTERDAY

**X7 - TPUG BEST-GAME 4**

-BASIC 4.0 F40-  
INVADERS 4.0  
FAST INVADRS 4.0  
ACROBAT F40  
CAR RACE F40  
MISSION IMP F40  
NIGHT DRIVER F40  
BACKGAMMON F40  
OTHELLO  
BREAKOUT  
ASTEROIDS  
PINBALL  
PETMAN 5  
JOYSTICK INV 4.0  
BLOCKADE  
BASEBALL 7.3  
OSC LUNAR  
SUPER STARTREK  
STAR WARS  
MASTERMIND  
REVERSE-PUNTER  
ARROW  
BLACK BOX!  
BLACK JACK  
BOMBER

ROBOT CHASE!  
SNAKE 2  
YAHTZEE  
MOVMAZE2  
  
U7 - TPUG-UTILITIES 7

COPY-ALL  
PROCEP.EDITOR  
PROCEP.EXAMPLE  
PROCEP.INS1.WP  
PROCEP.INS2.WP  
RELREAD  
SOUP  
KEYWORD  
BASIC-AID.INST1  
BASIC-AID.INST2  
CBM EDITOR.INST  
E-ROM.MON.I1  
E-ROM.MON.I2  
POWER-AID.INST

TEDDY-APRIL82  
TEDDY.INSTR  
DAISY-APRIL82  
DAISY.INSTR  
5TH SCOTTE.INST  
5TH SCOTTE  
ML STOPKEY  
TAPE PHONO-PHILE  
DISK PHONO-PHILE  
PHONE NUMBERS  
MASTER TAPE LIBR  
DATABANK.31!  
SUPERSPEED SORT  
FIXFILE  
POINTER SORT  
FILE  
STRING THING  
SUPERMON64.V1  
STRING THING 64  
NOS TRANSLATOR3

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PET 32K Basic 4.0 new ROM, Dual floppy disks 2040 retrofitted DOS 2.1, Wordpro 3, POWER toolkit chip, Data Base, General Ledger, Some Games and cable interface for computer and drive. All in excellent condition. Phone Chuck 514/683-8440 or 683-2291. \$2100

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ATTENTION Commodore 64 owners. An updated version of "DRAGON'S EYE" compatible with the Commodore 64 is available to bonafied owners of the PET version for \$7.95 each. This version also includes colour enhancements and M.L. routines. Please send your tape or disk copy for update to Jerry Brinson, 10136 E. 96th St., Indianapolis, Indiana, U.S.A., 46256. The PET version of Dragon's Eye is available from Automated Simulations Inc.

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5 Cents per word, with \$1.00 Minimum.

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Canada M5M 4L6

### FOR SALE

An excellent Data Base called File Cabinet \$35.00 to TPUG members only at that price. MFS-2 Interface \$68.00 par version \$82.00 serial version. Products reviewed in the Midnight. Progress Computer 7073 LynneTree Way Citrus Heights CA 95610 (7)

COMTALK A machine language terminal program for the IEEE modem in ROM for BASIC 4. Features include: sending or receiving sequential, PRG or Wordpro files to CBM disk, ASCII or CBM format, 40 or 80 columns. Fast access to the terminal program since it always resides in the computer. Send a certified cheque or money order for \$19.95 to MICROM, 20 Gilder Dr., Suite #702, Scarborough, Ontario, M1K 5E1. Ontario orders, please add 7% sales tax. Please specify \$9000 or \$A000 for ROM.

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-- FOR TRADE

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### HELP WANTED

PROGRAMMERS needed for micros of all types. Call or write: L.I.F.E. Software Ltd., Suite 321, 7305 Woodbine Ave., Markham, Ont., L3R 3V7 - Telephone 416/475-8888

### WANTED

WANTED PET BEEPER manufactured by HUH Electronics. New or used. Include operating and service instructions, plus circuit diagrams if available. Need two. Mail price and details to: Dave English, 852 Oakwood Street, Orange, CA, U.S.A., 92669

WANTED for VIC-20: PET accounting programs you have converted to VIC-20 such as Accounts Receivable, Accounts Payable, Payroll, General Ledger. Must Be full blown. Memory no problem. Call Mass - 413/243-1364 after 6 PM or write KRUSE, Cape St., Lee, Mass., U.S.A.

# NEW

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### TPUG FEES

The TPUG fees are paid on an annual basis. This means that if you join in February of 1982, your membership for next year will be due at the END of February of 1983. This is going to help us at renewal time since all the members will not become due at the same time as they did in September last year. TPUG membership always includes a TORPET subscription and gives you admission to the annual conference, and access to the club library (see rules elsewhere). Canadian regular and student memberships also have access to all the meetings, which otherwise are \$5 per admission to the general public.

The membership fees are as follows:

- Canadian Associate members \$20.
- U.S. Associate members \$20 in U.S. funds.
- Overseas Associate members \$30 in U.S. funds.
- Canadian Student members \$20.
- Canadian Regular members \$30.

Membership applications are to be sent to:

TORONTO PET USERS GROUP  
c/o Chris Bennett  
381 Lawrence Avenue West  
Toronto, Ontario, Canada  
M5M 1B9

Include your phone number, no matter where you live and, if a student, your school affiliation.

### TPUG CLUB DISKS

To order TPUG club disks via the mail, just send \$10 for each 4040/2031/1540/1541 disk and \$12 for each 8050/8250 disk (payable in advance). This includes the price of the diskette, the labour involved to copy them and all postage and packaging charges. Do not send us any diskettes. The mailing address is:

TORONTO PET USERS GROUP  
P.O. Box 100  
Station "S" Toronto, Ontario  
Canada M5M 4L6

Do not try to order any disk whose directory listing has not yet appeared in any issue of the TORPET. Most of the directory listings can be found in issue #12 (August/82) of the TORPET with cumulative updates printed in each new TORPET. Please include your membership number and return address with all orders.

### COPY TREE

The copy tree is a procedure whereby TPUG members can get a complete copy of the TPUG library in 4040 disk format.

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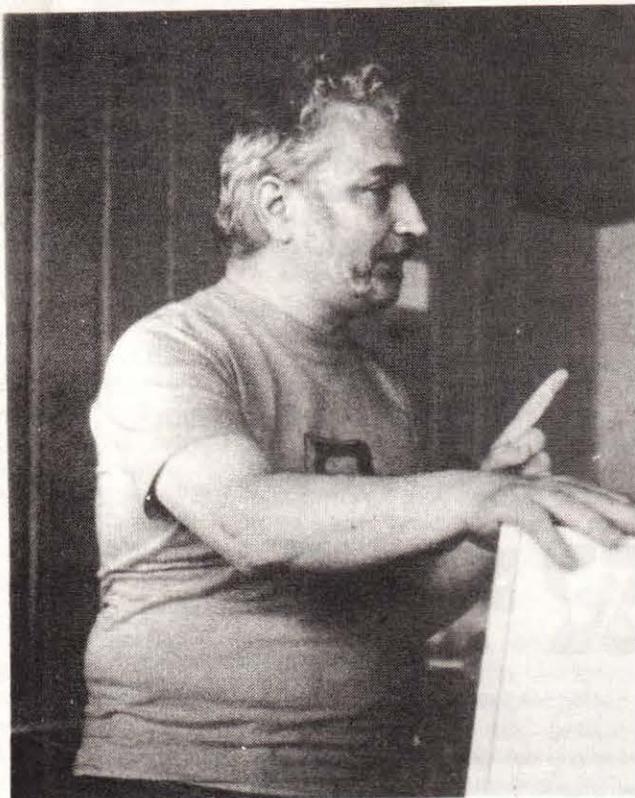
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## Butterfield on Ontario Educational TV Network



Jim Butterfield

Say, did you folks know that Jim is acting as technical advisor to TVO (That's the Ontario Educational T/V network) for their new series "Academy on Computers in Education" - twelve half-hour television programs beginning February 16th, 1983? This series, to quote their brochure, is "A basic course exploring the operation and function of computers. Designed for teachers, parents, and others interested in learning about computers and with computers." Not quite the stuff of your average TPUG meeting, but hold on there, look at all the stuff you get should you decide to 'enroll' in the course. A 64-page Participant's Guide, a mini-Correspondence Course, a 3-issue Newsletter, a 40-page Educational Applications Handbook, a Bits and Bytes Resource Book (a guide to the companion series 'Bits & Bytes), AND should you select the option, a Hands-on Beginner's Manual complete with sample software designed specifically for the PET, Apple II Plus, or TRS-80 Model III. So what's it all cost? \$59.00 for the whole mess (\$53 if you don't want the Hands-on part), and according to Carl Hildon (why is it that Editors seem to know everything?) worth every penny, if merely to pass on to your mother-in-law the next time she questions why you don't bring her daughter to visit anymore. The address, for those who might have missed a brochure, is TVO Academy on Computers in Education, Part-Time Learning, TVOntario, BOX 200, Station Q, Toronto M4T 2T1.

# Atari® Games On Your VIC-20?

The "CARDAPTER/1" will allow Video Game Cartridges designed for use on the Atari Video Computer System to be played on a standard VIC-20® **\$129<sup>00</sup>**

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CD002 Centipod	\$29.95
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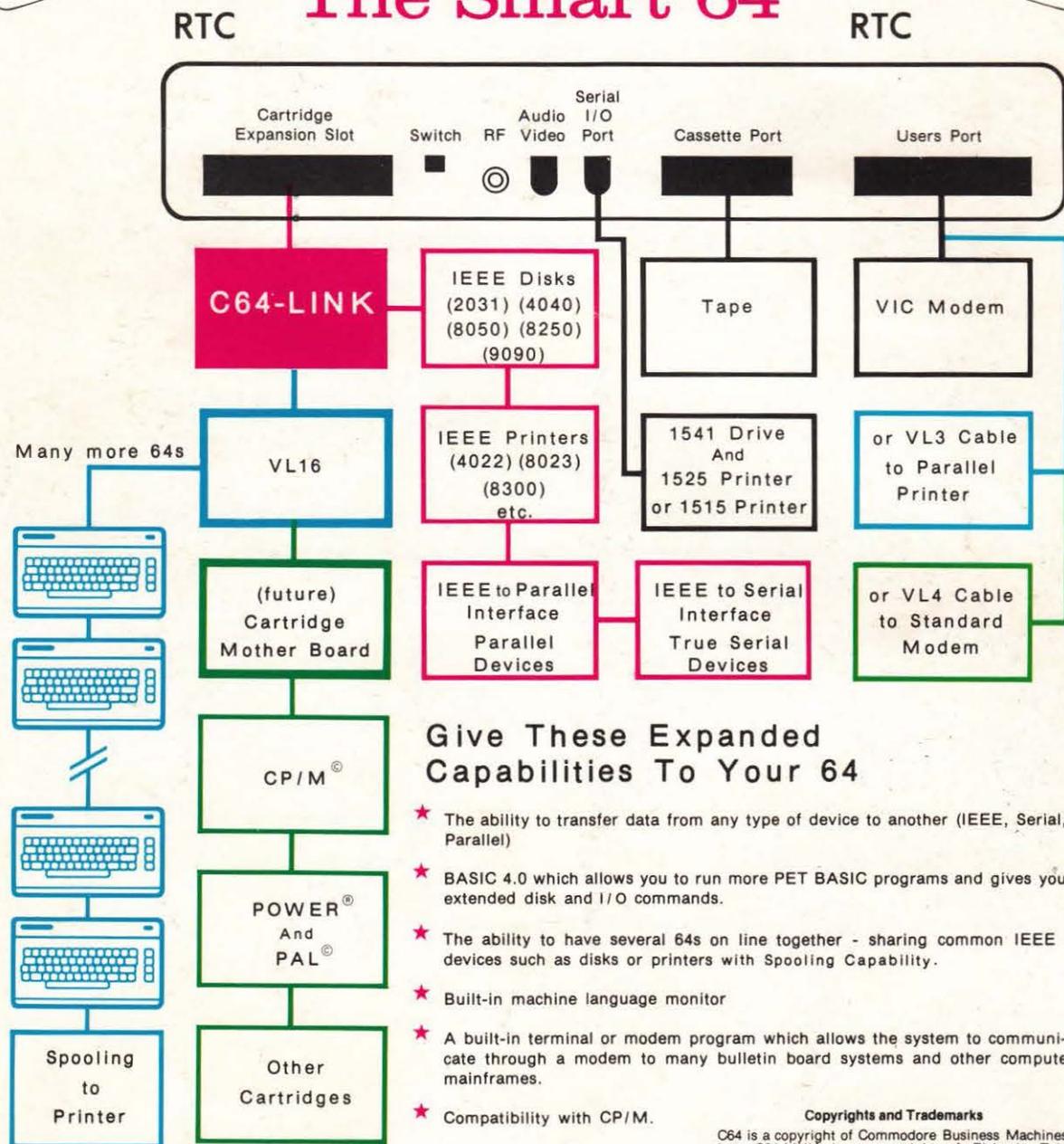
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