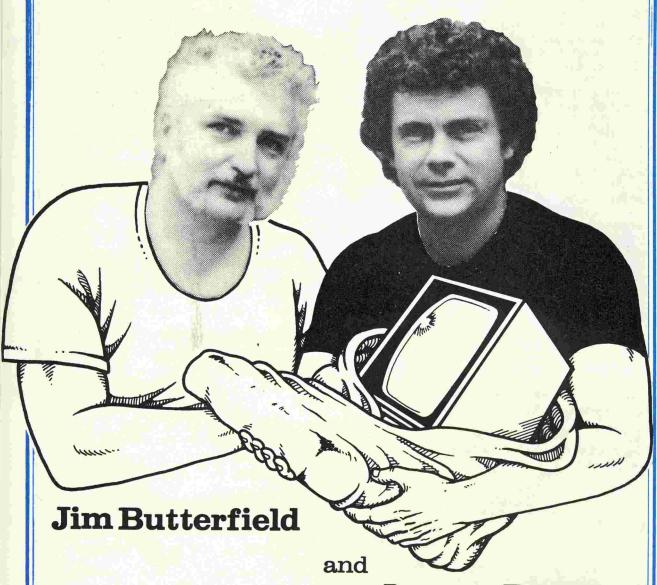
THE TORPET

BULLETIN OF THE TORONTO PET USERS GROUP

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Lyman Duggan

TPUG's Founding Fathers

3 stories p. 2—9

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MACHINE LANGUAGE GROUP

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CALENDAR

TPUG 1982 - 83 Schedule

Central Chapter

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

Wed. Sept 15, 1982 (First meeting)

Wed. Oct 13, 1982

Wed. Nov 10, 1982

Wed. Dec 8, 1982

Wed. Jan 12, 1983

Wed. Feb 9, 1983

Wed. Mar 9, 1983

Wed. Apr 12, 1983

Pet Conference May 13,14,15, 1983 @ George Brown College

Wed. June 8, 1983 (Last meeting)

Westside Chapter

Meetings are in the cafeteria at 7:30 at Sheridan College, Oakville on Trafalgar Road (2 miles north of the Q.E.W.)

Wed. Sept 22, 1982 (First meeting)

Wed. Oct 27, 1982

Wed. Nov 24, 1982

Wed. Dec 22, 1982

Lyman Duggan TPUG's Founding Father

It all started in the summer of 78. I decided is now displayed on a 15X15 foot theatre screen to buy a TRS 80. Some how a Newfie friend of mine for all to see with ease. A major breakthrough (Fred Wilson) convinced me to buy a PET instead, for the club. Frank Winter, a new member is So off I went with money in hand to find my new toy. Final stop: The Home Computer Center and a very confusing meeting with Dr. Hung. After much money waving I finally convinced him that I was serious and he helped me load a 2001 into the trunk and several PETs connected to the projector. serious and he helped me load a 2001 into the trunk of my car! It came with a free program (Lunar Lander) and a copy of Pet User Notes #2.

After tiring of Lunar Lander I typed in "NIM" from the Users Notes. Six times I typed it in and it wouldn't work *@#\$!! Humm! seems to be written by some chap from Toronto named Butterfield! I called him on the phone and he invited me down to his home. While I was there I met a friend of his (Peter Jennings) who was writing a program called Microchess, Impressive!!

Jim Butterfield said I should visit the TRACE Club (Toronto Area Computer Enthusiasts) with him. I attended several meetings and saw lots of KIMS, \$100 bus, and home brew computers but no PETS. PITY!!

The Home Computer Center announced a course in Basic Computing and I signed up. The teachers were Les Palenik and Dr. Hung. Classmates were: Louise Watson, Andrew Chiu. Jim Jonkman, Doug Williams, Sandy Cavin, Jerry Tenenbaum, Stu Richie, Eric Lampton, Gord Reithmeir and 2 or 3 others.

On the last evening of the course I was very afraid that these new found friends and PET owners would never be seen again so I took down names and phone numbers and we agreed to meet names and phone numbers and we agreed to meet somewhere sometime! In the weeks that followed i got phone calls "When are we getting together??". Finally I set a date and we agreed to meet at my place.. should be room enough for 12-15 people! Jim Butterfield agreed to demo some new programs. More phone calls "I hear that you are getting a PET group together, can I come?" I rented the party room at my condo and 35 people showed up!! Didn't know there were 35 PETS in the city! We had a great time. Butterfield a natural cityl We had a great time. Butterfield, a natural teacher amazed us all with his blend of humour and computer knowledge.

Next meeting 50 people showed up. We somehow all fit in the room but it was close! We had to have a bigger meeting place. I now had a video and sound interface, 2 TV sets, gallons of coffee and lots of do-nuts. As the club grew it became a riot just buying donuts. Try going down to your corner donut shop and ordering 20 dozen, you'll see what

Next month I rented a small theatre in the Science Center. Expensive. \$75.00 just for coffee! Membership is now 60-70 and growing.

Another meeting at the Science Center But this time something new! I persuaded a manufacturer of video projectors to give us a demo on their commercial video projector. PET

for all to see with ease. A major breakthrough for the club. Frank Winter, a new member is impressed with the projector and buys one for Sheridan College where he is Dean of Computing. The club followed the projector and Frank to Sheridan. They have a beautiful theatre and several PETs connected to the projector.

While one speaker was working another could be loading his machine to get ready for his turn on stage. Membership grew and grew. Much help was received from Jim Butterfield, Mike Bonneycastle, Don Whitewood, Bruce Beach, Chris Bennett and the good people at Commodore Canada.

For those who never attended let me describe the meetings. We started with lectures at 7pm. Lectures were on hardware, software, programming and techniques. We took the all important coffee break around 9pm. I say important because this was the time for people to meet people and make friends. Name tags were handed out at the door to make things easier. We went back to lectures at 9.30 and stayed the around 11pm. After each lecture there was usually a question and answer period. Commusually a question and answer period. Commodore often participated. Some times Steve Punter (author of Wordpro) and Brad Templeton (author of Power) would take on Jim Butterfield in a match of knowledge. It was sort of like the young gunslingers afer Wyatt Earp. At 11pm (we're not over yet!) we went into the computer class for a copy session, as Sheridan had about 35 PETS at our disposal!!

Then one day my boss came down from Montreal to see me. He said, "I want to be Frank with you Lyman" and, as he was the big cheese I said, "OK Frank!" He said we want you to move to Florida. I said, "how about September?" (It was April first). He said, "June!" I said, "June!" and eight weeks later I moved into my new home in Tampa!!

The club, by the way, never had any business meetings. I had attended several ham clubs and had seen the bickering and balony that took up most of the evening and tried successfully to prevent the same thing with our computer club. At first it was a pure dictatorship but with input from a few friends. Suddenly I was leaving and i dumped the whole thing into a surprised Mike Bonneycastle's lap! Mike, a gentleman, clever programmer and good friend was just the man to take CLUB 2001 on to bigger and better things. He gathered a good team of people around him and has, with lots of help, managed to make TPUG one of the largest computer clubs in the world!

Cherie and I are happy to see the way you have grown. We wish you well and miss you all.

Kindest Regards,

Lyman Duggan

TPUG's Grandfather

GETTING ACQUAINTED WITH JIM BUTTERFIELD

by Gail Hook

Jim Butterfield's gravelly voice speaks in the measured phrases of one used to teaching or being quoted for publication. His looks are unremarkable —-he's rather short, greying and middle-aged. Yet he brings to his interest in microcomputers a curiosity and sense of delight which led him first to an absorbing hobby, and then in February, 1981 to a new career as a freelance writer, consultant and teacher.

How did the transition to a new career take place? "Well, almost purely by acident," Jim replies. "I worked for CN/CP (Canadian National/Canadian Pacific Telecommunications) for twenty-four and a half years. I quit solely for the reason that the company had decided to move substantially away from the centre of the city (i.e.Toronto). I was faced with a considerable amount of commuting time that would make it impossible for me to continue with my hobby at the same time I was working. When faced with that choice I really had no choice and I quit."

It was in 1964 while Jim was working for CN/CP that he spent a year as a programmer on a rather specialized computer, a Collins C8401. Although FORTRAN and COBOL were being developed, the Collins didn't use an advanced language. Programmers had to do almost everything in machine language. Jim soon moved into other areas of the company, but a little over ten years later, "I decided to find out what this 'micro' stuff was all about and started watching the current magazines. I finally decided to purchase when I saw a completely pre-built machine called a KIM-1 which had a 6502 microchip in it. That turned out to be like a return to the past. Everything we had been doing a dozen years before on the large million and a half dollar computer we were doing again on this little two hundred and fifty dollar board —including making the same mistakes."

One machine led to another, and Jim began sharing his knowledge with other microcomputer users, and writing about his discoveries. Born in western Canada, Jim got his first writing experience there many years ago as a continuity writer for a couple of radio stations. Jim smiles, "That means I spent about a year of my life writing commercials." Besides the machine language column and numerous articles he contributes to Compute!, Jim writes for the Commodore trade publications, a British magazine called Printout and for the Torpet.

Jim's writing is informal and witty in spite of its technical content. He achieves this easy-t-o-read style in two ways: "I try to write it as I would say it. I do a lot of presenting material to both kids and adults and I try to keep the same style in my writing. Also, whenever I can I slip in a simple example program. Then even if the antiques or ancestral

readers can't understand what I mean, they can run the programs which are constructed to prove the same point I'm trying to get at with narrative.''

Lecturing and teaching courses, such as the machine language course he gives each month to a special interest division of TPUG (Toronto PET Users Group), provide Jim with feedback about problems and areas where people need more information. He has a reputation for being generous with his time, and his phone is open from 10 a.m. to 10 p.m. Monday to Friday. "If somebody phones me up and asks a question which shows they just haven't bothered trying it themselves, then I will sometimes be a little short, because it does seem like a waste of my time. But most people who call do so because they're stuck on something. It's just a question of getting another opinion. If I get a number of inquiries in a certain area, that's usually a signal that it's time for me to write an article about it. It's a very good way of keeping posted on what's bothering people at the moment."

In addition, Jim does what he calls 'light consulting', principally for Commodore. This spring he went on a Western Canadian promotional tour for the VIC. He's also frequently invited to shows such as the PET Show in London, England which he attended in June, 1982. Jim finds this part of his work 'really great fun' because it provides opportunities for travel.

Vicki Butterfield, Jim's wife, is not a computer enthusiast. Jim observes, "She really feels that to be involved in computers at all would be competitive, so she simply stays completely away." Sometimes Vicki accompanies Jim on his travels, but often she chooses to stay at home and pursue her own interests. During the last election, Vicki ("Spoiled Ballot") Butterfield ran as a candidate for the Rhinoceros Party in the Toronto riding of Broadview/Danforth. Her party platform contained promises to move Parliament to Florida for the winter (most Members are down there anyway, so we might as well have better attendance) and to eliminate winter by seasonally adjusting temperatures. At first, she was shy of meeting the public; but people were so delighted to have a 'rhinoceros' to liven up the political scene that the venture proved enjoyable.

Jim adds that Vicki also enjoys time to herself. 'I think she has a gothic view of life and likes to see herself alone in this large mansion with a pot of tea in her hand, wearing trailing garments, followed by three cats.''

The Butterfield mansion is a modest brick house within walking distance of downtown Toronto. It is comfortably cluttered with books, plants, and the three cats. However, only Sacha, the Siamese, has an interest in computers. With a feline knack for finding the centre of warmth and attention, she often dozes on top of whatever PET is in operation. There are no antiques or ancestral ghosts in the attic

either. Jim uses it as storage space for whatever books and computers he can't cram into his small

At this moment the office contains a changing assortment of computers drawn from: four PETs of varying screen sizes and ages, a VIC, an Atari 800, a European unit called an Alpha, a KIM and a Rockwell AIM. The "disk tower" consists of the Commodore disk units (4040 and 8050) and of two Commodore disk units (4040 and 8050) and an Atari disk with a Commodore 2023 printer "of an Atari disk with a Commodore 2023 printer of ancient vintage" perched on top. Bookshelves along one wall are overflowing, and every available inch of floor space is covered with piles of diskettes, books and papers. Amazingly, Jim seems to know into which pile to dive for what he needs. He would like a new printer, but he shakes his head, "If I had another, I'm not sure where in the world it would fit. I have several computer systems set up in a small space, plus a considerable amount of literature. It gets horrible-looking pretty fast. I also get a lot of stuff for review. I do want to comment on many of the books and pieces of equipment I get, but it's very hard lit's very time-consuming to review. it's very hard. It's very time-consuming to review something properly. I find it quite difficult to find what amounts to half a day to go over a book carefully, or a full day going through a piece of equipment thoroughly."

The emergence of microcomputers as a basis of social, not merely technical interaction is one of the facets of his interest that Jim most enjoys. He notes that in the early days of "roll your own computers", everyone had a different machine, and sharing of information was minimal. "Suddenly, along came the KIM. Everybody had the same computer. An amazing thing happened —and this is multiplied many times over in the Commodore line—neonle built a social life. in the Commodore line --people built a social life around microcomputers."

The thriving Toronto PET Users Group is a case in point. Jim had what he calls a "Machiavellian on Lyman Duggan whom he persuaded to hold the first meeting in his basement one summer evening. While he firmly rejects any organizing responsibility. Jim contributes a great deal as a friend of the club, speaking at meetings and sharing his expertise. His meetings and sharing his expertise. His presentations at the monthly TPUG meetings are greeted with enthusiasm.

The club has been run by a hard-working executive since Lyman Duggan was transferred to Florida two years ago. In August, 1982 its membership exceeded 2000, and is growing at the rate of 40 new members a week. Jim admits, 1982 its post of 40 new members a week. Jim admits, 1984 and 1984 its post what to talk about "It's getting harder to know what to talk about at those meetings. There are a number of people who have the ability to track down any part of the machine they want to go after, and who are quite skilled at machine language. As a result, my sympathy is with the beginner. I'd rather bore ten experts than lose the bulk of the people, so I try to keep things fairly simple."

The club has its share of young "whiz kids", but more surprising, many members are of retirement age. Business users of micros are also well represented. Jim notes with amusement that computer companies still seem a little puzzled by all this user interaction, even though they realize by now that these are not the traditional complaint groups. "The groups arrived almost spontaneously. By the time the manufacturers had decided maybe they were

a good thing, most had reset their sights on a good thing, most had reset their sights on commercial users. They never really thought that business users would band together. And I think partly we're still in that phase where manufacturers think that all they have to do is make sure they have a few really good pieces of software, and the user groups will go away. They don't —because the secret truth of it is most people want to wait until the store door is locked, then out Space Invaders on." is locked, then put Space Invaders on.

Jim rarely sells his software. He states, "I would like to foster an environment where people pass out their software with reasonable generosity. I think that by showing a good example, I might sort of lead the way in that." He notes that his software usually is written because he needs to use it or to illustrate a point, and it costs him nothing to give it away. Often Jim distributes his work on the TPUG disk because that keeps him from having to answer individual requests.

However, Jim vehemently supports an author's copyright: ''I believe very strongly that the person writing an original program has the right to do as he chooses with that program. If he chooses to sell it or to request that it not be copied except for a fee, then he has absolutely that right. I will support that.''

On the other side of the coin, Jim believes that On the other side of the coin, Jim believes that the person who takes money for software acquires an obligation to support the program in terms of upgrading it and furnishing the purchaser with the means to modify the program. He says, "That's another good reason to give programs away. I really feel that most people who put down a lot of money for software feel that they are not buying a disk or cassette tape, but they are buying a service."

The problem of software piracy might solve itself with the increasing business use of microcomputers. Jim laughs, "If an employee ran to the boss and said, sChief, I think you should give me a raise because I just saved you five hundred dollars, I lifted a copy of a program, I really don't think very many businesses would stick a cigar in my mouth and give me a promotion. They would more likely start keeping an eye on me."

Jim predicts that eventually renting software may be the best way to distribute it. A yearly fee could be charged for the use of the software in return the user would receive software. In return the user would receive continuing support on such things as continuing things support ranty and documentation. In Jim's words, "On all the things that go to make the computer feel warm and supported and cuddled."

Such a rental system might give the education market more appeal for writers and distributors of software. However, Jim suggests that providing students with access to computers in the very early grades should perhaps be given first priority. 'As I understand the writings of Seymour Papaert, the earlier a child becomes exposed to computers, the better it is likely to be I have seen no evidence to conis likely to be. I have seen no evidence to contradict this. It seems to me that more important than anything formalized we teach young people about computers is that we get them familiar with the concept, we get their fears allayed, we make sure that the usefulness of computers is understood at an early age. By the time a student gets to high school, computers are an oddity. There's something not quite natural about them —something manufactured and solemn. If you use computers in grade two or three you simply understand that they're around and they're going to help you whenever you feel like using them.''

Teachers are faced with devising methods of guiding computer studies and providing resources for students, many of whom will soon outstrip them in programming ability. This can be an intimidating task, but student enthusiasm should make it stimulating and challenging as well. Jim notes, "We have in the microcomputer one of the most incredible forces that has ever happened in education. I'm not talking about games; games don't last very long. Students are begging for access to this logic device. It has no precedent. I don't know what specific educational objectives are precisely to be served. All I know is there must be something in the whole phenomenon, some need in the young mind that causes an intense urge to interface with the computer, to try things, to make the computer do things."

Part of the appeal comes from the creative nature of programming. Jim finds programming mentally stimulating, and it soon becomes irresistible because you know that if your program doesn't work, the reason is that you haven't yet risen to the task. 'Programming is creative not necessarily in the most visible sense. If you write yourself another Space invaders it might end up looking like everybody else's. I sometimes like to compare programming, especially machine language programming which is more exacting, to doing a jigsaw puzzle. Why would you sit there for two or three days and put in all this effort when you know that the end result will be a rather crummy-looking picture? The point is that you will have felt you have accomplished something, that you have brought together a number of skills, and even though it's the same as everyone else's, in a sense you have created it. It's the same thing with programming —you feel so good when it all comes together, when it all works.''

But what if it doesn't work? When you're the ranking expert, what do you do when you get stuck on a problem? ''Well, when you reach a certain stage, and it really isn't all that hard to achieve, then you have control of all parts of the machine. Once you get to that point, and there are many people who have achieved that, you don't have to ask anybody. You can go in there and look for yourself. One of the messages that I try to deliver to people is 'if I can do it, you can do it'. Because often there isn't anything in the problem that logically you can't look at.'' Jim has another, more devilish, method of solving a programming puzzle. At the May TPUG meeting, he presented 'VICbreak/Paddle' (Breakout for the VIC) which didn't work as he wanted it to. Does this present an image of hundreds of enthusiasts staying up all night trying to outprogram Jim Butterfield? If they did, they toiled in vain because Jim came up with his own solution a couple of days later.

Microcomputers will undergo many changes in the next five years. Jim makes several general predictions: memory will be cheap, machines more powerful, and at the same time less expensive. The biggest single change will probably be a move TORPET Sept/82 page 6

toward better human interface. Commodore's easy screen-editing features are still relatively advanced, and other micros should incorporate better editing features. Colour and graphics will be almost universal and easier to use. Peripherals such as light pens, paddles or joysticks will simply plug in. Things such as upper/lower case letters, now viewed as optional by many companies, will be fully standardized. There will be some moves toward better languages, but Jim notes that "BASIC appears to be indestructible at present."

More specifically, Jim offers some insight into the future of existing microcomputer companies: "I think we can say with some certainty that IBM will survive, not necessarily because of the merit of their products, but because IBM will gather around itself a massive amount of support. Radio Shack is very strong. Like IBM they will probably survive for reasons not directly associated with quality. This is not a reflection on their quality, but they have access to so many outlets of their own that they can support continuing sales. Atari has so far suffered from its games image."

The survival of other brands of machines will probably depend upon the success of their new products. Commodore has four new machines announced but not yet delivered. (The PET II. Commodore-64, the MAX--formerly Ultimax, and the CBM II. Information about these machines is beginning to appear in the current literature, for example the June issue of Compute.) Jim speculates, "One of the most interesting phenomena could be Sinclair. They are like the Freddie Laker of computer systems; that of course has its advantages and its potential pitfalls. Sinclair has introduced a series of small, not very powerful, but remarkably inexpensive computers. While people who are used to the speed of say a PET or a VIC would find some of the existing Sinclair computers very slow, we can't ignore the fact that Sinclair through Timex is going to sell an astonishing number of machines." Jim looks for a very interesting battle between these less-expensive machines which are likely to be sold in every corner drug store, and the more powerful products. He notes that people tend to be loyal to a product line, and so far Sinclair's line has a clearly defined top end. Whether this situation will change as a result of demands from buyers of machines such as the ZX-81 who want to upgrade their systems remains a matter for speculation.

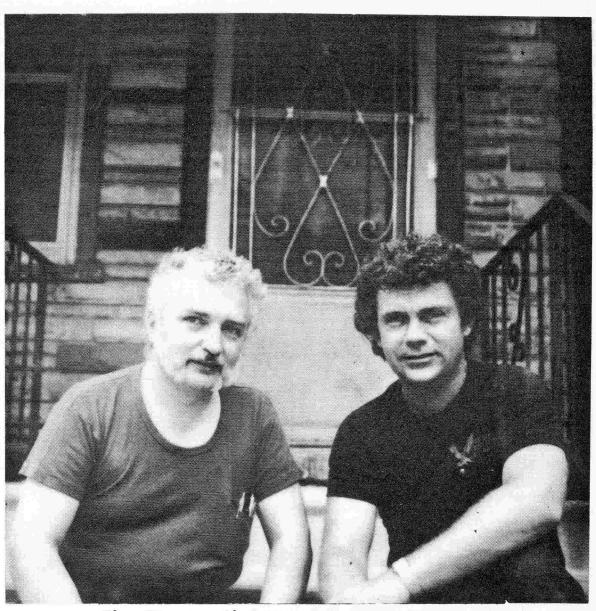
As computer prices drop, it is likely that people will begin to see a computer as an affordable addition to the family's financial management, entertainment and education. Wider distribution of machines will affect society in several ways. Already, of course, people use home computers in a limited way for business, and more commonly for enjoyment and exercise of mental agility. "People test themselves against their computers by asking, 'Can I make the computer do this task?' People also go to the computer for something resembling relaxation. I was talking to a microcomputer owner who is having difficulties in his business. He told me he goes home, speaks to no one, and works on his computer for an hour or so. Only when he shuts the machine off does he say 'helio' to everyone. He finds the computer a very great pacifier in some sense—perhaps he takes his energies out on it. He feels that he comes out of that environment more of a human being and his family is very

understanding of it. Now that's not precisely enjoyment, but it's a very worthwhile thing."

Uninformed people tend to fear computers and, with some reason, they feel that informaand, with some reason, they feel that information about themselves collected in the databanks of business and government makes them potential victims. Jim feels that people armed with the facts rather than the myth of computers are better equipped to cope with society. "If the computer tells your fortune, this is a harmless and amusing thing for the computer to do —unless you have somebody who believes in it grimly and with determination. If you understand that essentially you are talking to something no more intelligent than a bunch of transistors, you will not be seduced or misled by this sort of trash.

"The most important change that small computers have brought is they have restored to the individual a sense that he has control over to the individual a sense that he has control over the events around him. Not only can his computer calculate a mortgage as well as his bank can, but he has control in that he will not simply accept any nonsense the computer prints and mails to him. He's no longer at the mercy of this sort of thing. Essentially, it's related to the question of competence. If you can handle these little beasts, then in one sense at least you are more competent. You understand more about some of the things which are happening in the world around you. That in itself is probably one of the most profound things microcomputers do."

continuted next page-



Jim Butterfield and Lyman Duggan

(on Jim's front porch)

As we become more aware of a computer's true capabilities and limitations we may better assess the complex arguments on both sides of the issue of artificial intelligence. Jim defines Al very simply: "A computer which adapts its behaviour based on what it has learned from external courses is showing artificial intelligence. its behaviour based on what it has learned from external sources is showing artificial intelligence." He cites the game called 'Animals' as a simple example of a program which learns from the user. "'Animals' says it will guess any animal you can name. The first few times, you're going to name an animal it has never heard of. It will ask you for more information about the animal and put it in its list. Eventually you will run out of animals you know, and then it will know as much as you do."

with great possibilities for the future —one which Jim fears will not reach its potential. "I wish I could see a stronger future for videotex. Things like Telidon, Prestel and so on have a conceptual problem for me. They seem to be predominantly one—way only communications systems, perhaps a little bit like television only not as effective. You have a few people communicating to a lot of people. I don't view that as a good move, or even a typical move in this day where people are getting competence in their own hands. I think that if Telidon were more of a two—way interface, if more people could contribute, then you might have more of what I would call a lively medium."

Jim keeps very busy, and finds he must force himself to get away from computers for relaxation. He observes that when his hobby became his business, "That's almost a bit of a problem because I still have fun with what I'm doing." Prowling around whatever city he happens to be in is one of his favourite diversions. Jim particularly enjoys Toronto and New York because the downtown areas come alive at night. In a few cities, such as Los Angeles, he finds the police look on explorers with suspicion, so he police look on explorers with suspicion, so he has to be careful. He adds, ''I do play the piano quite badly. Occasionally I go and dig dandelions out of the garden if I have time. But there is a little bit of change in the order of things. Since my hobby has become my work, I can't do it all the time."

DAVID HOOK — TPUG Librarian

it all started several years ago with Ciub 2001, the forerunner of TPUG. Through a friend, I learned of the existence of the club in the summer of 1979. Perhaps prophetically, it was the original C-60, with the original 88-program library, that brought me into the club. If I'd only known then, ... (etc.).

From those humble beginnings, the club membership has swollen from 70 or so to over two thousand members.

Over that same period, the library has grown, by almost the same proportions. Today we boast 1832 entries in the catalog.

The club's founder and chief organizer, Lyman Duggan, moved to Florida in early 1980. In a classic demonstration of Parkinson's Law, Lyman was replaced by an eight-member board of directors. The current Bonnycastle Administration retains five of those original eight volunteers. eight volunteers.

Since the fall of 1980, the flood of public-domain software commenced. First, the twelve disks from Michigan, then the Commodore Educational Advisory Board disks (now totalling seven), then ten from Silicon Valley PUG, then ten from ATUG (Strasma's ASM/TED group), seven from Ottawa PUG, seven from SPHINX...

Amidst all this embarrassment of riches, we have had the guru of PETdom, the honourable Mr. Jim Butterfield, delivering the best of the world's public-domain software right to our door.

Since Toronto has long been home to many of the best PET programmers, we have had a continuous stream of contributors from continuous within the club.

With all these happenings of the past 24 months, the Executive's foresight in attempting to become the central clearing—house for Commodore software has proven to be a formidable undertaking.

Our first endeavour was to organize the software into subject areas, hoping to sort out the obvious duplicates and eliminating the lesser quality offerings where similar programs were involved. Over the past two years, this has been a solo task— I profess to having reviewed more programs than any other individual. (Any pretenders to the title may challenge, but only if they've handled more than 6000 programs). Our library's "archives" comprise nearly eighty disks, from which the current library developed. disks, from which the current library developed.

Nearly eighteen months ago, the second stage of the program was commenced. A com-

mittee of ten "Volume Managers" was recruited. They were to have taken their subject area, with the duplicates already weeded out, and done a written review of each program in a Utilities onto a few disks. A full description of standardized format. This would have provided this classification may be found elsewhere in TPUG members with documentation and equipment this issue. requirements/ limitations of each program.

Another year has passed and about seventy of the club's disks remain in the possession of our volume managers. Maybe they will all arrive back in my mailbox next week?

Seriously, Dave Goff and his Games group have recently completed their 9-disk library. You can read their handiwork in The Whole PET Catalog. Our new Music editor, Paul Krzyz, has delivered the re-organized S1 and S2 disks. He has done a fine job and promises major developments regarding 4-part harmony ViC

After six months, only one manager had I have reviewed and organized these into three reported back (thank you, Dr. George Plasecki). George Plasecki) dated with VIC software very shortly.

The blizzard of software has not yet declined to scattered flurries. Our monthly meetings still seem to be adding about 120K of original or improved versions to the library.

THE BASIC BOX

by Chris Bennett

Yes here it is folks, another INPUT routine article about VIC bugs and the INPUT statement I decided to start off the season with one of the which follows this article).

10 INPUT A\$ 20 GOTO 10

Lines 500 and 510 show how this routine is called. Line 500 inputs up to 12 characters of called. Line 500 inputs up to 12 characters of information. Line 510 inputs up to 40 numeric RETURN key with nothing else. All you see now is digits (The period is also included as numeric). 'ready' and a flashing cursor. The VIC and C-64 The variable B\$ contains the INPUT string and B have not got this problem. A null string in A\$ is contains the value of that string (Zero if Alphabetic). correctly returned. However, the INPUT statement also has a bad habit of accepting in the next issue of the BASIC BOX, I will describe cursor control and other function keys. This how to use this routine, together with a few causes all kinds of problems. (See Robert Baker's tricks, to create very professional input screens.

most basic but most important routines needed. Now for the description of this particular by someone programming on the PET, VIC or C-64, routine. It is very simple and uses two variables to pass information. L contains the maximum The INPUT statement in BASIC causes a couple length of the field and N allows only numeric of problems. On the PET, just pressing return with if set to 1, or anything if set to zero. I have placed no data causes a break in the program. For this routine at the beginning of the program example, try this:

since routines at the front of a large BASIC program run faster than those at the end.

Lines 500 and 510 show how this routine is

```
10 goto 100
15 b$="" z=1
20 for i=1 to 1: print***;: next i
25 for i=1 to 1: print "[left]";: nexti
30 get a$: if a$="" then 30
35 b=asc(a$): if b=13 then 65
40 if len(b$)=1 and b<>20 then 30
45 if b=20 and len(b$)>0 then b$=left$(b$,len(b$)-1): print"[left]*[left]";: goto 30
50 if (b<32 or b>95) and (b<193 or b>219) then 30
55 if n=1 and ((b<=47 or b>=58) and b<>46) then 30
60 b$=b$+a$: printa$;: a$=**: goto 30
65 l=len(b$): b=val(b$)
70 if len(b$)<z then for i=1 to z-len(b$): print ";: next i
75 return
            n=1 (numeric), n=0 for alphanumeric
100 rem
            l=length of field
110 rem
120 res
            gosub 1
500 n=0: 1=12: gosub 15: print: print: print b$,b
510 n=1: 1=40: gosub 15: print: print: print b$,b
```

Reader's Reviews

VIC-20 OPERATING SYSTEM BUGS

Robert Baker, Atco, N.J.
(Writer of PETpourri in MICROCOMPUTING Magazine)

Everyone should be aware by now that computer systems do not always function 100% by the book. Occasionally, small errors or operating system quirks appear and we can usually live with them once documented and well known. More serious problems may require upgrade or replacement ROMs or program patches to correct problems that cannot be programmed around by the user.

Well, the VIC-20 is no exception and I've come across two problem areas so far that bear mentioning. The first problem has to do with the INPUT command and line wrapping on the VIC's 2column display. The problem appears when you print a prompt for an input command and the prompt is longer than 22 characters, causing the display line to wrap to a new line. This is assuming that the prompt and the input variable are separated by a semicolon so that they're expected on the same line. Whenever this situation arises, the prompt itself is returned along with any keyboard entry made by the user. Well, the VIC-20 is no exception and I've come by the user.

When the program is expecting a string input (A\$), you simply get more characters than you expected, but the program still runs. If the program is expecting a numeric response (A or A%), than you get a REDO FROM START error message. The input prompt is re-displayed, and the program waits for new input from the user. Now you have a problem, since no matter what you enter, the input prompt is returned to the program along with whatever keyboard entry is made. Since the prompt is not a valid number, the system is hung in a loop it cannot get out of.

If you hit the RETURN key without entering any characters first, the system simply returns the last keyboard response entered on the VIC so you're still stuck in the loop. Even the RUN/STOP key cannot always get you out of this error condition since the program is not really executing any basic statements.

Here's a little test program that will quickly demonstrate what is happening in your VIC:
10 INPUT'PLEASE ENTER ANY TEST
RESPONSE'';A\$
20 PRINT A\$

When you enter your response and hit Return you'll see the entire prompt re-displayed followed by your keyboard entry. If you now type in PRINT A\$ as an immediate command you can prove to yourself that the A\$ response the program received is really as shown with the prompt included. If you change the A\$ to A or A\$ in both lines, you'll now see the REDO FROM START error when you try to run the program again. You'll even see you try to run the program again. You'll even see the error when you input a valid number response. Now try hitting the Return key alone or the RUN/STOP key to get out of the loop. There are some ways to get out of the loop but if all else fails just turn off the VIC and start over.

correctly on any other Commodore systems. Fortunately, you can easily overcome this problem by simply adding a null string to the beginning of the PRINT# statement:

20 PRINT#3,"";SPC(5):"HI THERE"

to make everything work correctly. You see, the SPC or TAB only causes the problem if it's the first item in the PRINT# statement, any other place is OK. In this example, I used device #3, the display screen, since it's the simplest device to run test cases on. The problem does, however, occur on all devices using the PRINT# command. including the printer!

These errors have been reported to Commodore but there has been no response as to how or when they'll be fixed. As long as we know about them, they can be avoided.

By the way, this same problem occurs if you use a PRINT command for the prompt and an INPUT command to get the response, if there is a semicolon at the end of the PRINT argument. Try

this little example:
10 PRINT"PLEASE ENTER ANY TEST
RESPONSE";

20 INPUT A\$ 30 PRINT A\$

You should see the same results as before. This problem is annoying but can be avoided. The best methods are to either limit input prompts to a single line or get the input on a new line without using the semicolon in the PRINT statement.

As I mentioned earlier, there is another problem area in the VIC-20 besides the one just problem area in the VIC-20 besides the one just described. The second problem involves the PRINT# command. When you open a logical device and use the PRINT# command to output to that device, you'll get a SYNTAX error if the first argument of the PRINT# statement is a TAB(...) or SPC(...) function. This little example shows what happens on the VIC:

10 OPEN 3.3
20 PRINT#3 SPC(5):"HI THERE"

20 PRINT#3,SPC(5):"HI THERE"
You should see a SYNTAX error reported on line 20. You'll get the same result if you replace SPC with TAB. The line is perfectly correct according to the manuals and will execute

REVIEW by JOSEPH P. CHALALA

The following is my experience with Commanda Systems, inc. Several months ago, is sered three programs from them. It took Data Systems, ordered three ordered three programs from them. It took about six weeks to receive them. Of the three, two worked and one crashed. I wrote to them about this program and have not heard from them. It has been about six weeks since I wrote them.

The programs I ordered were MEDIA REGISTER (this one never worked), GUEST REGISTER and ETCH A PET. I would classify them as most unreliable. They sell educational programs to schools.

LIPS

by Gail Hook

One of the most enthusiastic people who attended TPUG's giant copy session last June being purchased for use in schools on Long was Charlotte Deschamps, president of the Long Island. One major use of these micros will be island Pet Society (LIPS). She heard about the copy computer assisted remedial mathematics session only the week before it was to take place, so she hopped on a plane and arrived only a few hours before it began.

LIPS was started in 1978 by Ralph Bressler of The Paper. Meetings are held once a month to discuss new developments and make contact with other PET users. Bressler spent a lot of time in the beginning teaching and helping the members.

LIPS hopes to incorporate the TPUG philosophy into the club to make it a vehicle for sharing sur information and to distribute only public domain software. Many of the thirty members are educators and are aware of the problem of software piracy. The Long Island school system employs one audio-visual consultant just to make sure no copyright computer programs promates. They learned their lesson early when they was had to make a legal settlement for using to copyrighted video tapes.

programs. The government is supporting this project because students were graduating from high school without basic math skills. and suing the schoolboard because of it.

Deschamps pointed out to several members of the TPUG executive what she believed to be an unethical use of the TPUG software by dealers in the US. Many deallers advertise \$3000.00 worth of free software with the purchase of a PET—in effect they include the TPUG library. She was surprised that the response here was "if it sells surprised that the response here was PETS, all the better".

After spending a couple of hours chatting to TPUG members, getting disks filled with programs, and surveying the excellent information sessions provided, Charlotte was heard to mutter, "I think I'll just have to move to Toronto".

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Review Touch Typing Tutor by Frederick C. Arnold

in the May issue of Torpet, there is a request for information or a review about Taylormade software. Well, I bought a \$16 one called "Touch Typing Tutor." It is an excellent program that works very well on a Vic. I recommend it highly. They have many programs and one can send for a catalogue at Taylormade Software, 8053 E. Avon Lane, Lincoln, Nebraska, 68505, U.S.A.

Review Cheap Disk Storage Ed Crossman

Most stationery stores carry a fiberboard box with a removable lid for holding 5"x8" index cards. This box contains a sliding partition so that even if you have only a few disks, they can stand upright. To keep the disks organized, the same stores will carry 5"x8" separator cards which have alphabetic index tabs. The box is a bit wider than it need be, but after one year of use this has proved no problem. The box itself is about 12 inches long, holds about 120 disks tightly packed and costs about \$9.00. The one I use is: Agate Card Tray, #95, made by Globe-Weis, Bristol, PA, U.S.A.

Complete TPUG

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READER'S CORNER

Letter to the Editor

August 16, 1982

I am writing in response to a comment made Your assistance in correcting "JS" in the June issue of The TORPET erroneous matter is greatly appreciated. (found on page 31).

Commenting on what Professional Software has done with Create-A-Base (by the way, our new program is called InfoPro, NOT DataPlus), JS states: **My sort is in it without permission."

Please be informed that no copies of InforPro have been sold with the sort written by JS. There had been a previous arrangement with the author of the software and JS when Create-A-Base contained the sort written by InfoPro not However, does contain

in correcting

this

Sincerely,

William T. Murray National Sales Manager Professional Software Inc. 51 Freemont Street Needham, Ma 02194 (617) 444-5224

Eds. Reply: We will have to let you fellows sort JS's sort.

We fully expect The TORPET will print sort. He may have jumped the gun if you haven't a retraction to the false statement made by JS. released it yet. Now that you all have our Also, the reason that JS has not received a copy curiousity up I am sure we are all looking for of the program for review is that as of this date, a copy to review. Was all this just a publicity ploy, we have not yet released the final copy of InfoPro JS?

Editor's Page

Disaster Disk

Well, we can scratch another good idea of the old editor. The disaster disk turned out to be a disaster. No one was interested. The idea was that we would get together a collection of programs that would be of use to municipalities in case of disasters (hazardous chemical information data information, resource chemical management bases, people locators in case of mass relocation, radiation hazard algorithims, key personnel directories, etc., etc.) and make this disk available through the TPUG library. The response was nil.

For the present I shall have to file that one along with my plans for a universal language which I am sure most of you are tired of hearing me talk about. Not all my ideas work out by any means. The FIG (FORTH Interst Group) group flopped and the COPY Tree is fairly stunted as compared to what I envisioned it would be. However, the Machine Language Group has continued to blossom, thanks to Jim Butterfield and Jim Carswell. And I still hope there will be a favourable response to The Whole PET Catalog Handicap Disk

Anyway I now have two new projects I would like to propose. One is a diskette for the Handicapped. There are all kinds of programs that might be gathered together into a special collection of this kind, and then TPUG could offer it as a social service to institutions and individuals that could make use of it. I would like very much to hear from anyone who would like to work on a project like this.

VIC Interest Group

The other project has something to do with the VIC. Quite what it is I am not sure yet. Perhaps a VIC copy tree or a VIC monthly tape magazine, sort of like the old CURSOR that we had for the PET. Anyway, at our next meeting (Sept 15th, at Leaside) I would like to meet with any of you who would like to explore some ideas for a special VIC interest group (VIG). (For the same purpose I will try to get out to the first meeting at Sheridan on Sept 22, if they would like to have me come).

Copy Tree

For anyone wishing information about the copy tree, please contact Bruce Beach at the TORPET Sept/82 page 14

following address or phone:

Bruce Beach Horning's Mills, Ontario Canada LON 1J0 Phone 519/925-6035

(519) 925-5376

New Magazines By Bruce M. Beach

The Midnite Software Gazette longer appearing on our pages, the reason being that it has become an entirely separate subscription magazine combined with The magazine combine PAPER. All The TORPET readers who would like to continue to get the valuable information that it contained are encouraged

to send their subscription to:

Midnite Software Gazette
635 Maple St
Mt. Zion, II 62549 U.S.A.

Suscription rates are \$20U.S., \$25Can., \$30 overseas, \$40 overseas airmail; for 1 year (which is six issues). We sincerely wish them the best of luck in this new venture, and we will sorely miss their excellent contributions to the content of the TORPET

Another new magazine, or rather the reappearance of another old friend is that of the TRANSACTOR. Watch for it on your computer store newsstands. Probably will appear around the first of October, I am told by the editor Karl Hildon. It is initially planned as a bi-monthly with the first printing going to be several thousand. the first printing going to be several thousand.

I don't know it they are taking over the old Transactor mailing list or not. The magazine will contain all the good types of Commodore information that were in the original Transactor. I know that Jim Butterfield has given them a memory map for the Commodore 64. The magazine will have a slick cover and has good funding behind it, so you can send \$15Can., \$15U.S., or \$18U.S. for overseas to:

The Transactor

c/o BMB Compuscience Canada Ltd. 363 Main Street Milton, Ontario Canada L9T 1P7

And believe it or not I am told there is still another new independent Canadian Magazine Commodore products. It is called Commodore and it is available about Strictly available from:

> Strictly Commodore, Inc. 47 Coachwood Place, N.W. Calgary Alberta Canada T3H 1E1

I am told this one contains mostly program listings and the issue being reviewed for me was 36 pages long with the pages being one-half the TORPET size. Cost; Can\$20, U.S.\$18, Overseas

Sorry, I can't tell you more -because I don't know anything more.

VIC Printer Routine

by Michael Kelinert

the VIC-1515 printer has its here are several nice, built-in Although limitations, there functions which allow the user to easily manipulate output. One very useful function is the dot addressible print positioning command. This enables the programmer to specify a specific dot address from home position at which the printer is to begin printing.

The format used is as follows:

PRINT CHR\$(27);CHR\$(16);CHR\$(HI);CHR\$(LO);A\$

Here, CHR\$(16) is the code for character addressing and CHR\$(27) is the code used to

determine these two values, the following formula may be used, where DA is equal to the dot address:

HIINT(DA/256): LODA-HI*256

The short program below uses this feature to spread out the characters in a line to text equally, thus producing an even right margin. It will work correctly as long as the inputted string does not exceed eighty characters.

This program is only a sample to demonstrate Here, CHR\$(16) is the code for character the attractive output which amy be produced. addressing and CHR\$(27) is the code used to specify a dot address. The value for HI is the high incorporated into other programs, such as byte of the dot address and LO is the low byte. To a word processor, to produce very nice results.

5 INPUT A\$: OPEN 4,4: CMD4
6 IF RICHT\$(A\$,1)=" " THEN A\$=LEFT\$(A\$,LEN(A\$)-1): GOTO 6

10 A=LEN(A\$): B=(474/(A-1))

20 FOR C=0 TO A-1: D=C*B: D=INT(D/256): E=C*B-D*256

30 PRINT CHR\$(15); CHR\$(27); CHR\$(16); CHR\$(D); CHR\$(E); MID\$(A\$, C+1,1);: NEXT C

40 PRINT#4: CLOSE 4

VIC Software Reviews by Michael Kelinert

AMOK, \$24.95 from UMI--This is among the better games I have seen on a 3.5K VIC. Totally in machine language. Use of hi-res graphics is excellent. All movement is very smooth. Closely resembles BERZERK arcade game. Good use of sound. Slightly overpriced but very good. Recommended.

Chomp Chase, \$15.00 from PETTED—Another version of PAC MAN. Very good use of definable characters but movement is not smooth. Part Machine language. A little slow and ghosts move too randomly. Joystick and keyboard versions available. Recommended.

VIC Monitor, \$7.00 from PETTED—Machine language monitor written in BASIC. Too slow. No Registers command. No commands to LOAD and SAVE memory! Not recommended. Best bet is a machine language monitor in ROM, such as Commodore's VICMON cartridge.

Animation Tutorial, \$20.00 from CFi—Comes as a tape cassette and tutorial booklet. Tape contains animated "mission to mars." Six other short programs contain various segments of first program to demonstrate programming techniques. Booklet explains programs and animation techniques. Only for beginners! Only explains use of built-in graphics characters being used with PRINT statement.

Monster Maze and Math Hurdler. \$15.00 from Creative Software—Monster Maze is in machine language and is a pretty good game. Player uses the joystick or keyboard to manoever a man through a maze, trying to find the correct path to the exit while also avoiding up to three monsters. Math hurdler is part machine language. It is cute but I cannot see why it is sold together with Monster Maze. One must solve math problems before the hurdler stumbles over the hurdle at the bottom of the screen. It is ridiculous on higher skill levels since it may give such problems as 53x87? This must be figured out in three seconds! Monster Maze should be sold separately for half the price.

Hesplot, \$16.00 from Human Engineered Software— Machine language subroutines enable hires graphics. Awkward to use: all must be programmed through POKE and SYS commands. Plot and erase points and vectors. Not practical. Can only use one—third of screen in 3.5K VIC. 3K expander is needed to obtain larger screen area for plotting. Hires utilities in ROM cartridges, such as the Super Expander, are much more versatile.

Target Moon, \$10.00 from Microspec--Keyboard. BASIC. Very slow and boring. Aliens move slowlty across the screen while player shoots missiles at them. Save your money on this one.

Alien Panic, \$10.00 from Nufekop—BASIC. Joystick and keyboard versions available. Graphics are very impressive. Similar to Apple Panic on the Apple computer. Player must dig holes in layers of brick and cause the aliens to fall through. When three aliens have fallen to the bottom, the game ends and the player's time is shown. It becomes boring quickly because it fails to set a better goal for the player. Play may go on forever because you cannot be killed by the aliens. Lacks a score or rating. Some may like this but others won't.

Rescue from Nufon, \$10.00 from Nufekop--BASIC. Keyboard. Very good use of graphics. Player wanders around a building stumbling upon aliens, humans, and elevators. Object is to transport all 30 humans out of the building. Time and energy are limited. Doesn't take much skill but keyboard controls are awkward. Impressive and a good buy for \$10.00 but may become boring to some and chances of transporting all humans is very slim.

Mobile Attack, \$20.00 from Micro-Systems-Requires 8K expander. Keyboard or Joystick control. Written totally in machine language. Available on tape, disk or cartridge (for \$30). Incredible hires graphics. Movement of all characters is very smooth. Object is to destroy all "cruisers" in a maze to move onto the next maze. Seven different maze types. Very fast and exciting. Very highly recommended.



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RESOURCES

We have been requested by several readers to publish this resource list in The Torpetand so here it is.

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HOW TO SUBMIT PRODUCTS FOR REVIEW

If you have a software or hardware product that you would like reviewed, just send it to:

Toronto Pet Users Group 381 Lawrence Ave West Toronto, Ontario, Canada M5M 1B9

comments you send.-ED

We will return it as soon as it has been uated. All software and hardware evaluated. All software and hardware products are, of course, kept in strict confidence.

Chris Bennett

HOW TO SUBMIT ARTICLES

The TORPET is always in need of articles about the PET, CBM, VIC or C-64. If you wish to submit an article, send it to:

Toronto Pet Users Group 381 Lawrence Ave West Toronto, Ontario, Canada M5M 1B9

if you can send it on disk, it will save us time in re-entering the article ourselves. However, we can also take typed or printed articles or even handwritten ones if necessary. To encourage you, we are paying \$10 per page that the article fills in the TORPET. This is not much yet, but as time goes on, we will be able to offer more. Also if you send your article in Wordpro, Wordcraft or RTC format ON DISK, we will return that disk with the contents of any TPUG library disk of your choise.

(That is a SUPER idea and offer Christ Lots of you readers out there should take advantage of this great offer! -ed)

1JO CANADA

Librarian's Report

THE MONTHLY DISKS David A. Hook Club Librarian

THE BEST OF TPUG David A. Hook Club Librarian

The library has grown from a handful of programs to nearly 2000 files. We have enjoyed a wide variety of programs. More importantly, many modifications and updated versions of these programs have arrived.

Questions such as: ''Which Basic-Aid version are you using anyway'', or ''Where do I find a version of Acrobat that works on the Fat-40'' are frequent topics of frustrated members.

in an attempt to draw together the choicest material, I decided to organize this series. In answer to the cries for documentation, I will endeavour to provide some descriptions, to keep

All disk IDs in this series will be coded "X". followed by a digit. So far, disks X1 through X6 have been released into the library:

X1-Util 1: Packed with every utility you've ever wanted, all in one place. Check the directory listing, then order this one.

X2-Util 2: All the Machine Language extended monitors, a symbolic assembler and two unassemblers.

X3-Game 1: Basic 2.0 Games X4-Game 2: Basic 4.0 Games X7-Game 4: Fat-40 Games (soon)

A separate disk for all the best games, depending on ROM version. All three have identical contents, including never-before released games.

X5-Game 3: Simulations, principally Butter-field's Original Adventure (40- & 80-column versions).

X6-Misc 1: Text editors, mini word processors, mailing list, input editor and graphics utilities.

I again stress the wealth of new material, including Robert Baker's Disk Master, just published in Microcomputing (Kilobaud). The Games disks will also offer a few surprises.

A long-time member will appreciate the collated and condensed nature of the series.

The new member will get the "best of the past" in a compact fashion.

At each meeting of TPUG, we include a copy session so that members may acquire the programs demonstrated that evening by our speakers.

included on that disk will be a selection of programs submitted by members or received by myself since the last meeting.

It is our policy that every program appearing on our copy disk has been reviewed prior to its inclusion. Thousands of hours have been devoted to the organization of our library.

The value of our library is dependent on the members finding worthwhile programs on their disks when they get home. Our Associate Members receive only the TORPET and library privileges, so we feel obligated to maintain standards. Even the modest copy charge of the club would seem extravagant if we offered "another Star Trek" month-after-month.

So I insist on screening contributions before they are included in the library. We try to judge on only two grounds: uniqueness and utility. If we've already got it, then the ''new'' program should offer an improvement.

At the meetings then, the speaker's programs go immediately on to the copy disk. Then we fill it out with the array of material that has been received since the last meeting.

By reviewing programs first, we also try to minimize the appearance of copyright software within the library. When such stuff slips by, we always pull it out when told of its status. Members can help us, by alerting the club when they recognize a commercial offering amongst our public-domain programs.

These monthly disks are coded with a $^{\prime\prime}T^{\prime\prime}$ designation as the disk ID.

The series from T1 through T8 covered meetings through June 1981. They were merged into their respective subject areas before the November 1981 copy session. They are now retired from service and may not be ordered any longer.

The series from T9 through TH represent the These disks were first prepared for the June 1981/1982 session of monthly meetings. Their 19, 1982 Copy Session. If you didn't get them there, you should arrange to get them through the club's order system.

The series from 19 through in 1981/1982 session of monthly meetings. Their directories appear in Issues #9 and #10 of the TORPET. Their contents have also been merged into the regular library (by subject). You may obtain these in the regular way, until the summer of 1983, when they will be dropped.

The eleven disks (by subject) covering the 1981/1982 season were first made available at the June 19, 1982 Copy Session. Their contents are printed in this issue, for the first time.

Ordering information may be found elsewhere in this catalog isssue.

COPY/ALL
FILE RETRIEVER
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5TH SCOTTE
TEDDY-APRIL82
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RELATION GRAPH

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PHONE NUMBERS
TAPE PHONO-PHILE
DISK PHONO-PHILE
TABLE MATH
DATA GENERATOR
disklist.apl (SuperPET)

LIBRARY CATEGORIES

David A. Hook Club Librarian

When the library committee first met, we decided on several classifications to encompass our software. The titles chosen then have held up well, and only three additional categories have been added since.

At the conclusion of our 1980/1981 program, the library contained 32 disks in nine subject areas. At the present time, we have 52 disks, in twelve areas.

The categories are distinguished by the first character of the disk ID. The number in parenthesis denotes the current number of disks offered in each:

A(5) ASSEMBLER: Source code for machine language programs. B(3) BUSINESS: Programs for home/business. financial.

C(2) COMMUNICATIONS: Terminal BBS, Ham Radio.

E(9) EDUCATION: Includes CEAB library. G(11) GAMES: Space, Simulations, Word/Number, et. al.

L(1) LANGUAGE: New category-- COMAL language.

N(3) MATH/SCI/MED: Mathematics, Science & Medical.

S(1) MUSIC: 4-part harmony drivers/songs & CB2 also.

U(6) UTILITIES: The bit-juggler's delights.
V(3) VIC: Sub-classified into Games, Utilities
& Demos.

X(6) BEST OF: New series. See separate article. Z(2) MISCELLANEOUS: Graphics demos mostly.

CLASSIFIED ADS

5 cents per word with \$1.00 Minimum. payment in advance to:

Chris Bennett 381 Lawrence Avenue West Toronto, Ontario M5M 1B9

FOR SALE

An excellent Data Base called File Cabinet \$35.00 to TPUG memebers 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 Hights CA 95610 (8)

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Secretary's Report

by Chris Bennett

CLUB DISKS

To order 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 c/o Chris Bennett 381 Lawrence Avenue West Toronto, Ontario, Canada M5M 1B9

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 this years' TORPET with updates printed in each new TORPET. Please INCLUDE YOUR MEMBERSHIP NUMBER AND RETURN ADDRESS with all orders.

Chris Bennett

CLUB TAPES

The procedure for ordering club tapes. To order tapes, send \$6.00 for each tape needed to:

Richvale Telecommunications Att. Peter Smith 10610 Bayview Plaza, Unit #18 Richmond Hill, Ontario Canada L4C 3N8

Make all cheques or money orders payable to 'Richvale Telecommunications' and please INCLUDE YOUR MEMBERSHIP NUMBER AND RETURN ADDRESS.

Richvale now has most of the disk library transfered to tape. Most disks require two tapes to hold all the programs. Each tape costs \$6.00, payable in advance, and includes the cost of the tape, mailing and handling. The contents of the tapes will be similar to the contents shown on the disk listings in the TORPET. Disks that do NOT require two tapes are V1, V2, V3,G8, G9 and N2. Send \$6.00 for these volumes. For all other volumes, send \$12 for the two tapes required to hold all the information kept on disk.

Do not try to order any tape 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 this years' TORPET.

HOW TO SUBMIT PROGRAMS

Programs can be sent to us either on disk or tape. The disk/tape will be returned to you as long as you have enclosed your name and address. It is also a good idea to put your membership number on the tape/disk just in case we misplace the letter or envelope that it came with.

Send all programs to:

Toronto Pet Users Group c/o Chris Bennett 381 Lawrence Ave West Toronto, Ontario, Canada M5M 1B9

TORPET BACKISSUES

Backissues of the TORPET are available for \$2.00 each (except for issues #1, #2, and #3 which are \$1.00 and issue #7 which is \$3.50). Issues #1, #2 and #3 are 4 pages long. Issue #4 is 8 pages long. Issue #5 is 16 pages long. Issues #6 and #10 are 32 pages long and issues #7, #8, #9, #11 and #12 are 48 pages long. The reason issue #7 is \$3.50 is that there are no original copies left and we must photocopy it to provide members with backissues. If you wish to order any of these old TORPETs, please send your cheque or money order to:

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

Please INCLUDE YOUR MEMBERSHIP NUMBER WITH ALL ORDERS.

Chris Bennett

MEMBERSHIP REPORT

At the end of August the membership was over 2100. Of this, 950 are in the Toronto area and attend meetings. This leaves about 1150 members who live out of town and benefit from the TORPET and club library. Also, we have 1400 Canadian members, 665 members in the U.S.A. and 35 members overseas.

At this time I would like to clarify the membership fees for TPUG. The 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.

The membership fees are as follows:

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.

Chris Bennett

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