

# TPUG Newsletter

Views and News of Toronto Pet Users Group

c/o John Easton, 258 Lake Promenade, Etobicoke, Ontario, M8W 1B3 phone (416) 251-1511

Summer— 2012

## *From the President -*

Well summer is upon us once again. Indoor activities seem to give way to outdoor activities and this doesn't leave us much time indoors with our Commodore computers, unless you're one of those strange people that set up a C64, 1702 monitor and 1541 disk drive on the patio while sipping on a cool lemonade! Whatever you fancy during the summer, try not leave your Commodore lonely.

After a successful World of Commodore show, the spring months saw an increase in members, interest, donations, and inquiries. This is great news for the club. We have tried and continue to try to keep the club on the edge by putting out the word and attending events that show that we're still around, have been around since 1979, and will continue to be around to support and promote all of the Commodore computer products from the PET to the Commodore 64 to the Amiga.

Speaking of products, we continue to keep up to date on the newest gadgets for Commodore computers. There are still many people in the Commodore community with the engineering know-how that are putting out products designed to keep our Commodore computers running into the 21st century. Our chapter meetings have continued to showcase many of these devices. I managed to get my hands on a micro IEC drive from Retro Innovations at the World of Commodore show, which uses a common SD card to store multiple D64 disk images and allows for rapid loading and running of programs on the 64. Very handy, but there are still many new devices (with very interesting names) to consider: Zoom Floppy (for copying/managing disk images), 1541 Ultimate, Keyrah, etc. The list of new gadgets for the Commodore 64 is endless, as are the future possibilities for the C64!

TPUG usually takes a break during the summer months of July and August. Usually our last chapter meeting in June focuses on repairing Commodore equipment, our chance to diagnose, hack, fix and tune up our venerable computers. Once again, we will be honing our soldering and chip-pulling skills to breathe life into a Commodore 64 displaying garbage on screen, sounding scratchy and very un-SID-like and curing various symptoms like "out of memory error". The night provides the perfect opportunity to learn more about the guts of the C64.

Despite the pull of summer, the summer months were always one of the best times for Commodore users. Many new games

for the Commodore were released during the summer months and many summer-themed games were released for Commodore users (Summer Games and Skate or Die come to mind). I can remember special releases of Commodore games at the local store always seemed to happen in the summer and I would often race home on my bike to try out the latest bought (or rented) game. I once stayed indoors on a hot summer day playing on the VIC-20 while my friends were enjoying the pool. The reason? Well, I just had to break 100,000 points on Pac-Man. However once I accomplished this feat, I then celebrated by jumping in the pool!

TPUG will start back up in September with chapter meetings on the third Thursday of the month. Next season promises more exciting demos and informative fun. With this new season there will be new challenges for TPUG. The biggest challenge we are currently facing is this: lack of volunteers. The club is short of volunteers to help out with the many activities that make our club run. Volunteers are the backbone of any user group and without eager volunteers, the club will suffer and many of the activities that we want to get done will not happen. If you have the time and the inclination, consider helping out TPUG by volunteering. We currently have a need of a willing volunteer to help out with our TPUG store. We had to shut the store down this year because we currently have no replacement to step in and do the necessary handling of inquiries and the picking, packing and shipping of Commodore merchandise. If you feel so led as to help us out in this area or any area of the club, let us know. Many hands in the club make light work!

Whatever you're planning for this summer as we head into the fall season, we look forward to another year of vintage computing fun! So, to celebrate the end of summer and the start of the fall season for TPUG, I wrote this vintage poem to honour the event:

10 PRINT 'HAVE LOTS OF FUN THIS SUMMER, AND  
KEEP THE COMMODORE ALIVE!'  
20 GO TO 10

**Happy Commodoring!**  
**Greg Van Laere**  
**TPUG President**

## Member Information

### Voice Info

We have discontinued our TPUG phone listing - contact members as listed here at home phones.

Website: [www.tpug.ca](http://www.tpug.ca)  
e-mail: [info@tpug.ca](mailto:info@tpug.ca)

### Membership Rates

**\$15 per year**  
**else, with e-mailed Newsletter,**  
**\$10 per year**

### Board of Directors

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### Support

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Member Records	Ian Colquhoun
Meetings	Leif Bloomquist
	and Ernie Chorny
Shows	Tom Luff & Ernie Chorny
Webmaster	Leif Bloomquist

### Newsletter

Editor John Easton (416) 251-1511  
[jeaston@rogers.com](mailto:jeaston@rogers.com)

## Meeting Schedule

**Westside and Amiga West:** Third Thursday of the month (except summer) at Alderwood United Church, 44 Delma Drive. Delma Drive is just west of and parallel to Browns Line, south of the Queen Elizabeth Highway, north of Horner Avenue. From the west, exit QEW at Evans Avenue, east on Evans to next stoplight, south on Gair to Delma Drive. From the north or east, follow signs from QEW or Hwy. 427 to Browns Line, exit right to Evans Avenue, turn south on Gair (first stoplight) to Delma.

Contact - **Leif Bloomquist** (416) 737-2328 [leif@schemafactor.com](mailto:leif@schemafactor.com)  
or **Ernie Chorny** (905) 279-2730 [chorny@tamcotec.com](mailto:chorny@tamcotec.com)

## From your Editor ...

With this issue, we commemorate the life of Jack Tramiel who died at the age of 83 in California on April 8, 2012.

Unlike most of his competitors, Tramiel was not a techno-geek. He was a jovial, cigar-smoking, balding and somewhat portly Jewish businessman known for hard bargaining and for the slogan: "Business is war". He drove down costs, cut prices and marketed the hell out of whatever he was selling. He said he targeted "the masses, not the classes".

Born in Lodz, Poland, 13 December 1928, this Auschwitz survivor at 18 married Helen Goldgrub a Bergen-Belsen survivor in 1947, then emigrated to the US in 1948 to join the US Army, where he learned repair office equipment. On leaving in 1952, he used a \$25 thousand GI loan to set up a repair shop, Commodore Portable Typewriter, in the Bronx, New York. In 1955 he founded Commodore Business Machines in Toronto, to import and sell typewriters.

Tramiel's lucky break came in the person of Chuck Peddle, lead designer at MOS Technology. Commodore had bought this small American chip manufacturer to supply parts for its pocket calculators. Peddle told him that computers were the future, and that MOS had developed the cheap 6502 processor. He let Peddle design the Commodore PET (Personal Electronic Transactor) around the 6502, and in 1977 CBM entered the computer market.

*With a nod of thanks to **The Guardian** in the UK.*

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*Articles, letters, tips, questions, art, etc. are welcome. Send hardcopy or disks "Attn: TPUG Newsletter", or use Internet e-mail.*

*Advertisements are also welcome. Member's small ads are free. Commercial ads are \$100 per page with a \$10 minimum.*



**Notice to new owners of SuperPet and CBM 8296 machines**

TPUG has copies of the Waterloo LANGUAGE DISKS (3 in 4040 format) as supplied with the SuperPet on original purchase.

TPUG has the EXECUDESK disk (8050 format) as supplied with the CBM 8296 on original purchase.

These disks are an integral part of the operating systems of the above machines and since Commodore insisted on referring owners of these machines to TPUG for service, we have added these somewhat proprietary (and also virtually unobtainable) disks to our library - all part of the TPUG mandate of service to our members.

We also will attempt to search out copies of original program disks to replace corrupted disks. In this category you will find such programs as VISICALC, WordPro, and PaperClip.

**World of Commodore ... 1983**

The "World of Commodore" was the first international computer show organized by a computer manufacturer. This 1983 show, held at Toronto's International Centre, marked the 25th Anniversary of Commodore and this program (booklet) contains a great history of Commodore up until this point.

This 12 page program guide contains a list of vendors and advertisements from the era and is a wonderful tribute to Commodore and this great show which lasted over a decade. The show ran from December 8, 1983 to December 11, 1983.

Check out this historic find at <http://www.pcmuseum.ca/Brochures/WOCProgram.pdf>

**Editor's Update ...**

Sorry for the delay on this issue. Our president was AWOL for a few months and your editor was in the Great White North at his inaccessible cottage for most of the summer. (Inaccessible? Like, no electricity, no cell-phone, no TV, no road access ... and our venerable Evinrude seems to be on its last legs. \$4,500 for a new Mercury ? ... whoosht ... anyone with a slightly used 25 Horsepower, Electric-Start motor (my wife doesn't like pulling starter ropes) motor ... please feel free to reply!

But, we carry on regardless ...

John

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Note: Dealers and User Groups Welcome

**TPUG Logo Contest**

The winner of this contest is **Jim Buchan** ... he now has a credit voucher on account with Jim Brain. Since no one really felt any of the submissions were substantially superior to our current plain vanilla TPUG appellation, we've decided to stick with what we've got for the moment.

**JP. PBM Products by Mail is the NEW Manufacturer of Super Snapshot Cartridge V5.22 - NOW SHIPPING**

\*CURRENT Commodore Club MEMBERS SAVE \$5 MORE off the regular price before freight and taxes.

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Send \$2 for a catalogue	Canadians add GST/HST+\$	_____
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**Visit JPPBM.COM for full product listings and PayPal ordering information.**

# Joe's World ... 17 ... Copying Memory Blocks

## Absolute Addresses

Absolute addresses are not Page Zero addresses. While Page Zero addresses (0-255) may use only one byte, absolute addresses use two adjacent bytes; call the first one L (for low) and the second H (for high). Each memory location can contain any number 0 to 255 only, but two bytes in combination can point to 256 x 256 addresses, or to any address 0 to 65535. To find H, divide the address by 256 and discard everything after the decimal point. For example, to find the H of address 12345, divide 12345 by 256 which gives 48.222656 and after discarding we get H=48. To get the L, multiply H by 256 and subtract from the address. Here, 256 times 48 is 12288, and the L=12345-12288=57. Checking, 256 times H plus L equals the given address.

## Indirect Addressing

Using machine language, indirect addressing, always using two adjacent bytes on page zero, is done in two stages. First the L and H of the wanted address is found and then a given operation is done on what is contained in that wanted address. I often use for indirect addressing, for example, locations 251 and 252, with 251 containing the L and 252 the H of the wanted address. Assume that 57 is in 251 and 48 is in 252, which are the L and H of 12345. For example, the op code for indirect loading of the accumulator (780) is 177 or, in assembler language LDA(251),Y which also involves the content of .Y (782). Then if, for example, 123 is in .Y (782), 177 251 will put into .A (780) whatever is contained in (12345 plus 123) 12468.

```

0   rem" copy memory block by J. Quittner
10  print cH(14)cH(144)
12  def fna(i)=i-256*fnb(i)
13  def fnb(i)=int(i/256)
20  data 230,251, 208,2, 230,252, 96:rem"
Increment 251/2
22  data 169,251, 208,2, 198,252, 198,251,
96:rem" Decrement 251/2
24  data 230,253, 208,2, 230,254, 96:rem"
Increment 253/4
26  data 169,253, 208,2, 198,254, 198,253,
96:rem" Decrement 253/4
30  for i=820 to1023:read a:if a>255 then 100
31  poke i,a:next:stop
100 :print" Addresses of memory block to be
copied"
101 :poke 782,0: input"Bottom, Top";b1,t1
102 input" Copy that block starting where and
up";b2
103 d=b2-b1:t2=t1+d
106 print" Please CONFIRM (y or n):
107 print" You want to copy memory block
from"b1"to"t1"into"b2"to"t2";
108 input c$:if c$<>"y" then 100

```

```

109 if b2<b1 then 115
110 poke 251,fna(t1):poke 252,fnb(t1):rem up
source
111 poke 253,fna(t2):poke 254,fnb(t2):rem up
destination
112 poke 2, fna(b1):poke 3,fnb(b1):sys
852:goto 120:rem end of up?
115 : poke 251,fna(b1):poke 252,fnb(b1):rem
down source
116 poke 253,fna(b2):poke 254,fnb(b2):rem
down destination
117 poke 2,fna(t1):poke 3,fnb(t1):sys 878:rem
end of down?
120 :print"   DONE":end
130 data 177,251, 145,253:rem from source to
destination, up
131 data 165,252, 197,3, 297,7, 165,251,
197,2, 208,1, 96:rem" DONE up?
132 data 32,59,3 32,75,3, 76,84,3:rem next up
135 data 177,251, 145,253,:rem from source to
destination, down
136 data 165,252, 197,3, 297,7, 185,251,
197,2 208,1, 96:rem" DONE down?
137 data 32,52,3, 32,68,3, 76,110,3:rem next
down
139 data 999

```

Line 10 selects black and upper/lower case letters

Lines 12 and 13 define functions a and b (L and H)

Lines 20 to 26 - Subroutines for incrementing and decrementing 251/2 and 253/4 for indirect addressing

Lines 30 and 31 write the machine language into memory

Lines 100 to 102 ask the user to define the problem; .Y (782) is set to zero

Line 103 calculates d and t2

Lines 106 to 108 ask the user to confirm what has to be done

Line 109 will continue the program on line 115 if the destination addresses are below the source addresses.

The program uses indirect addressing, with the source addresses being in 251/2 and the destination addresses being in 253/4; after a number is taken from the source address, it is then copied into the destination address. After checking whether the task was done, the source and destination addresses are both changed as required, and the program repeats.

Incrementation means that 1 is added, with the maximum being 255. Incrementing 255 gives zero.

Decrementing means that 1 is subtracted, with the minimum being zero. Decrementing zero gives 255.

Lines 110 and 115 load the initial source address into 251/2, while lines 111 and 116 load the initial destination addresses into 253/4. Lines 112 and 117 load into 2/3 the final source addresses and start the machine language portion of the program as a subroutine. The op code 96 always returns any subroutine; here to line 120 when "DONE" is shown on the screen.

Lines 20 and 24 are increment subroutines, lines 22 and 26 are decrement subroutines of 251/2 and 253/4 as and when required. They all end with the 96 op code.

Line 20: 230, 251 increments 251 and then sets .P, (783). 230,2 interrogates .P and skips the next 2 bytes if 251 is not zero. 230, 252 increments 252 only if 251 is now zero. Similarly for 253/4 per line 24.

Line 22: 165/251 loads the accumulator (780) with the content of 251 and sets .P (783). 208,2 interrogates .P and skips the next 2 bytes if 251 is not zero. 198,252 decrements 252 only if 251 is zero. 198,251 decrements 251 in all cases.

Lines 130 and 135 are identical: One for up, the other for down. The source item is copied into the destination. Lines 131 and 136: 165,252 loads the content of 252 into the accumulator .A (780), 197,3 compares the content of 3 with whatever is in the accumulator and sets .P (783). 208,7 skips the next 7 bytes if there is no equality. If there is equality, then 165,251 copies the number that is in 251 into the accumulator .A (780). 197,2 compares whatever is in the accumulator with what is in 2 and sets .P (783). 208,1 skips the next byte if there is no equality. If the content of 252 is the same as the content of 3, and also the content of 251 is the same as the content of 2 then the program stops, the task having been done.

Lines 132 and 137: 251 to 254 are incremented or decremented as needed, and the copying continues.

Joe Quittner, TPUG, January 18, 2008

## Joe's World 18, Scrambled Text to and from Disk

This program will

a) optionally print typed-in text on paper, scramble that text based on a keyword or a key phrase (remember it well) and put the scrambled version of the typed-in text on disk, or

b) take the scrambled text from the disk, unscramble it using a keyword or key phrase, show the original text on screen, and optionally print the unscrambled text on paper. Printers differ; this works for the printer I use.

All characters have a number attached; for example "return"=13, "space"=32, !=33, etc. and this program scrambles text by adding the number of a text character to the number taken from a key character. Then the sum is written onto the disk. A longish key would make it difficult for someone other than the holder of the key to unscramble the text.

```
0   rem" Scrambled text to and from disk by
Joe Quittner
2   print CH(14)CH(144)
10  k$="":print"Enter keyword/phrase. End it
with the f1 key.
11  :gosub 997:print g$;:if g$=CH(133) then
print: l=len(k$): goto 20
12  k$=k$+g$:goto 11
20  :print:print" To scrambled (t) or from
scrambled (f)? ";:gosub 997
22  print g$:if g$="t" then 1000
23  if g$="f" then 2000
24  goto 20
997 :poke 204,0:get g$:if g$="" then 997
```

```
998 :if peek(207) then 998
999 poke 204,1:return
1000 rem" TO scrambled text
1002 gosub 4000:input" FILENAME";f$:if p
then pR7,"! ";
1004 close 8:open 8.8,8,"@:"+f$+",s,w
1006 print" Enter text slowly. End it with
the f1 key.
1008 for i=1to i+1:if i=i+1 then i=1
1010 gosub 997:if g$=CH(133) then 1020
1012 print g$;:if p then pR7,g$;
1014 a$=mid$(k$,i,1):h=asc(a$)
1016 g=asc(g$)+h:if g >255 then g=g-
256:pR8," 123"
1018 pR8,stR(g):next
1020 :if p then pR7
1021 print:clO8:print" DONE":end
1099 :
2000 rem" FROM scrambled text
2002 gosub 4000:input" FILENAME";f$:if p
then pR7,"! ";
2004 close 8:open 8,8,8,"@:"+f$+",s,r"
2010 for i=1 to i+1:if i=i+1 then i=1
2012 a$=mid$(k$,i,1):h=asc(a$)
2014 input#8,g$:s=st:g=val(g$):if g=123 then
2030
2016 h=g-h:if h<0 then h=h+256
2020 :if p then pR7,CH(h);
2022 print CH(h);:if s=0 then next
2028 goto 1020
2030 :input#8,g$:g=val(g$):h=256+g-h:goto
2020
2099:
```

```

4000 :rem" PRINTER ON?
4010 print" PRINTER ON? (y/n) " ;:gosub
997:print g$
4012 p=0:if g$<>"y" then return
4014 p=1:close 5:open 5,4,5:close 7:open
7,4,7
4016 for i=1 to 5:pR5,cH(27)cH(108)cH(6):rem
"Left margin =6
4018 pR5,cH(27)cH(81)cH(75):rem" Right mar-
gin = 75
4020 next:return
    
```

Line 2: Sets black colour and switches to the Upper/lower character table instead of the Upper/graphics table of the computer.

Line 10: k\$ is emptied out for the coming keyword/phrase.

Line 11: the next character is fetched from the keyboard and shown on the screen. If key f1 (=133) was pressed, then the length l of the string k\$ is found and the program branches to line 20. f1=133, f3=134, f5=135, f7=136, f2=137, f4=138, f6=139 and f8=140.

Line 12: the length of the key string k\$ increases as more characters are added to it from the keyboard. A longer key is safer.

Lines 997-999 provide a flashing cursor, indicating that the program is waiting for the user to do something.

Line 1008: The variable i will increase from 1 up to the length of k\$, then will start at 1 again, as long as necessary. Later, in line 1014, this will fetch and recycle the key character pointed to by the variable i.

Line 1012 shows the still unscrambled character on the screen and optionally puts it also on paper.

Line 1014: the key number h is obtained.

Line 1016: the key number is added to the number of the current text character. But if the total is above 255 then 256 is deducted and the signal 123 is put on the disk.

Line 1018: the total is put on the disk and the loop continues as long as there is another text character to scramble.

Lines 1020 and 1021 are at the end of the task.

Lines 2000 to 2099 are for unscrambling the numbers that will be fetched from the disk.

Line 2010 recycles the pointer to a character number from the keyword.

Line 2012 puts into h the number of that character.

Line 2014 fetches the next number from the disk and puts it into g. If it happens to be the 123 signal then the program branches to 2030.

Line 2016: Unscrambling of the text by deducting from the number taken from the disk, the number (=h) taken from the key (=g-h). The result is the number of the now unscrambled character.

Lines 2020 and 2022 put the now unscrambled text on the screen, and optionally, it is printed on paper.

Line 2030: After the 123 signal is encountered, the next number is taken from the disk, 256 is added to the g-h difference, the result being the number of the now unscrambled character.

Lines 4000 to 4020, a subroutine that works for the printer I use, gives the user the option to use or not use the printer, and if so, sets the left and right margins.

Joe Quittner, TPUG, January 15, 2009

## Joe's World 19 ... Guessing Game

How good are you at guessing? This program has the computer put a random number 1 to 5 only, into variable x and your task is to guess that number. Do this 25 times and then the computer will show you how many hits you got out of 25.

You may repeat this again and again, and eventually you will not reply yes. Then the program will show you how many times a given number of hits per 25 were obtained and also the percentage of the total number of runs.

You can also get the computer to do the "guessing". It takes more than three hours to have the computer "guess" 10000 runs of 25 guesses each, and I did that three times with the following results, how many hits out of 25 guesses, and percentages of the total number of runs.

0 hits	.40%	and .31%	and .41%
1 hit	2.72	and 2.15	and 2.00
2 hits	7.76	and 7.42	and 7.41
3 hits	14.50	and 13.23	and 13.34
4 hits	18.90	and 17.66	and 18.97
5 hits	19.35	and 19.62	and 19.58
6 hits	15.03	and 16.71	and 16.56
7 hits	10.38	and 11.53	and 11.04
8 hits	6.21	and 6.43	and 5.88
9 hits	2.99	and 3.05	and 2.93
10 hits	1.16	and 1.33	and 1.11
11 hits	.41	and .37	and .48
12 hits	.12	and .15	and .22
13 hits	.06	and .04	and .05
14 hits	.01	and zero	and .01
15 hits	zero	and zero	and .01%
TOTALS:	100%	100%	100%

```

0 rem" Guessing game by Joe Quittner
2 print cH(14)cH(144):dim a%(25)
4 def fnr2(i)=.01*int(10000*i+.5) rem round
to 2 decimal places
100 print"          MENU:
110 print"      Select which, a or b?
112 print" a. Guess which one of the numbers
1,2,3,4 or 5 is in x?
114 print" b. The computer will `guess`.
120 :print"          WHICH? ";:gosub
997:print g$
122 if g$="a" then 1000
124 if g$="b" then 1100
126 goto 120
129 :
997 :poke 204,0:get g$:if g$="" then 997
998 :if peek(207) then 998
999 poke 204,1:return
1000 :gosub 1091:n1=0
1002 :n1=n1+1:n=0:h=0: goto 1010
1004 :if n=25 then print"You got"h"hits out
of 25":a%(h)=a%(h)+1.goto 1008
1006 goto 1012
1008 :print" Do another run of 25? ";:gosub
997:print g$:if g$<>"y" then 1020
1009 goto 1002
1010 :gosub 1090:rem" Guess the number now
in x; 25 guesses
1012 :print n+1"    ";:input"1,2,3,4 or 5 ...
25 times";g2
1014 if g2<1 or g2>5 then 1012
1016 if g2=x then h=h+1
1018 n=n+1:goto 1004
1019 :
1020 :print"  RESULTS:
1022 :for i=0 to 25:if a%(i)=0 then
next:goto 1026
1024 print i"hits per 25 happened" a%(i)
"times" string$(fnr2(a/n1))"%":next
1026 :gosub 997:goto 100

```

```

1027:
1090 :x=1+int(5*rnd(0)):return:rem" Random
number generation, 1 to 5 only
1091 :for i=0 to 25:a%(i)=0:next:return:rem
" Clear array a%
1099:
1100 :rem " The computer does the `guessing`
1101 gosub 1091:input"How many runs of 25
`guesses` each";n1:n2=0
1102 :n2=n2+1:print
cH(158)n2;cH(144);:n=0:h=0:goto 1110
1104 :if n=25 then print:print spc(10)h"hits
out of 25":a%(h)=a%(h)+1:goto 1108
1106 goto 1102
1108 :print:if n2=n1 then print"There
were"n1"runs of 25 guesses each;";:goto 1020
1109 goto 1102
1110 gosub 1090:g1=x:print cH(30)g1;cH(!44);
1112 gosub 1090:g2=x:print string$(g2);
1116 if g1=g2 then h=h+1
1118 n=n+1:goto 1104

```

While typing, be sure to distinguish between the capital O letter and the number 0.

Line2: Character set = Upper/lower case letters, text colour = black, and the dimension of the (no decimals, integer) one-dimensional array a% is set to 25.

An array is a group of either numbers or strings and if its name has the % (*absolute*) attached, then it will take up less space in memory because % arrays, % constants and % variables consist of only integer numbers in the range minus 32768 to plus 32767.

Line 4: Function r2 rounds the floating decimal point numbers to no more than 2 decimal places.

Lines 997-999 make the cursor blink, indicating that the program is waiting for the user to type something.

By Joe Quittner, TPUG, March 19, 2009



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Commodore began as a typewriter shop and later began manufacturing typewriters itself such as this lightweight portable described in its 1963 annual report.

# JACK TRAMIEL

## ORIGINS OF THE ORIGINATOR

by Leslie Wood  
Toronto ON

The story of Commodore is completely entwined with Jack Tramiel, founder and architect of the company, and no story can be complete without a little bit of the flavour of the man behind the company.

Tramiel was born in Poland, and survived the Nazi concentration camps to immigrate to the United States after the war. His first association with the industry that evolved into the computer era was in his army days at Fort Dix where he became involved with the repair of typewriters. Once into civilian life, this was the business he pursued, and he even drove a taxi in New York City to help establish himself.

It was the typewriter experience that led to the start of Commodore a few years later when Jack moved his wife and two sons to Toronto in 1958 and started his own typewriter repair business at 2 Toronto Street, in the city's downtown core. Only the likes of Tramiel could have envisioned the Commodore International of today from that small repair shop.

Later in 1958, having grown to a strength of five employees, the company moved to more spacious quarters at 1905 Davenport Road. Two more moves for expansion purposes brought Commodore to 501 Yonge Street and then 630 King St. West at Bathurst in 1959, where it continued in sales and repair. The number of expansion moves in those early years attest to the hustle and hard work Tramiel put into his company, and the successful results he achieved.



A 1968 vintage Commodore Minuteman 2SR calculator.



## Commodore Past and Present

On the left: Another 1968 Commodore calculator, the US152-P which sold for \$350. It was because of the loyal calculator dealer network in Europe that Commodore now sells over 50% of the personal computers in many countries there.

Below: Commodore now holds over 80% of the market for education in Ontario.



Commodore is very much a result of Tramiel's anticipation of the future, and it's corporate philosophy is purely Tramiel's. Some of Jack's own thoughts are undoubtedly the best way to describe him.

#### ON CUSTOMERS

We produce for the masses not the classes. Quality and service is our commitment because if we don't give our customers the best they will know it

#### ON TECHNOLOGY

Commodore is driven by technology. We don't only introduce the products the customer wants, we introduce products the customer didn't even know were available.

#### ON MUTUAL IMPROVEMENT

Never settle for doing things the way they were done in the past. Always find new ways to do things better, cheaper and more efficiently.

#### ON SUPPLIERS

Never buy a product if you don't know what it costs to make it. Never buy below the supplier's cost to drive him out of business. Give him a profit but never more than our company makes.

#### ON BUSINESS

Business to us is not a sport, it's war. We are not here to play the sport but to win the battles. We will win because we work harder and smarter, and serve our customers better.

#### ON THE FUTURE

We're always looking at the future because we're helping to create that future...but the work is always done in the present.



The Commodore Boat, driven by Rob Scythes, is the 1983 Champion of the Canadian Boating Federation's Sportscraft Division. Commodore's sponsorship of the Scythes' boat is only one example of Commodore's community commitment to sport and youth in Canada.

## COMMODORE'S FAMILY OF PRODUCTS

Commodore's family of products provides consumers with a complete line of personal computers from the VIC-20 to the advanced "B" series business computer and the traveling Executive 64. The vertical integration of the company is a big advantage in developing product diversification while at the same time maintaining good performance/price ratios.

Of course, alongside the family of products Commodore has developed peripherals to enhance the capabilities of the personal computers. The company has developed a line of eight disk drives, numerous printers (some of which are letter quality), and a colour printer-plotter, a colour monitor, a datassette recorder, a modem for telecommunications, and a wide range of software.



Above: One of Commodore's new letter quality printers.

Below: Today Commodore has production facilities in several countries around the world. This picture was shot in Shannon, Ireland in 1964.





Inside ...

A tribute to Jack Tramiel, re-printed from the December 1983 issue of the TORPET ... the then newsletter of the Toronto Pet Users Group.

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— /Summer 2012 —

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