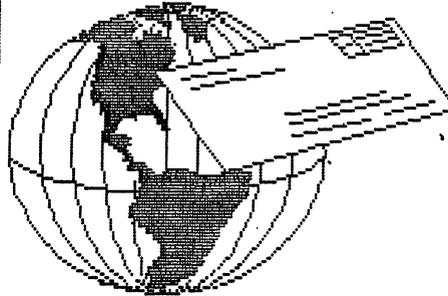


COMMODORE MAILINK

NEWSLETTER OF —
MEETING 64/128 USERS
THROUGH THE MAIL



May 2000

Meeting News

Well Spring has sprung!! I think I have used that tired phrase before. Usually I have to scratch my head to come up with something to say in this column. This time is different, read on.

Rolf Miller the treasurer has resigned effective June 1, 2000. I am looking for someone to take over this position. There is not a lot of work involved just very good bookkeeping. The busiest time of the year is from November to February when most members renew their membership. The person would open a bank account in their name and mine. Usually banks won't accept checks made out to the group as we are not incorporated. If you are interested or want to nominate someone please contact me.

Jean Nance has also resigned as of mid May. I am looking for someone to take over the job of finding editors for the upcoming year. The job asks that the person find an editor and send them the file for the heading for the newsletter, the file containing the Officers and the policy page. The managing editor also gives help to the editor when needed. A more detailed job description will be sent to anyone who is interested in the position.

I would prefer the volunteers to have E-mail access but it is not necessary. It just makes the transfer of information so much faster. I will not turn anyone down because they do not have E-mail but it would be to everyone's advantage to have this feature.

If you would like to volunteer for either one of these positions please contact me as soon as possible. If you know of someone who is interested please ask them to contact me. My address, telephone number and E-mail address are:

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MEETING 64/128 USERS THROUGH THE MAIL - OFFICERS

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TREASURER'S REPORT From: Rolf L. Miller, Treasurer

Following is a summary of the trust account as of March 31, 2000.

Balance			
1-31-00	\$2470.03	1-1-00	\$2606.03
Credits	333.00		547.00
Debits	629.06		979.06
3-31-00	2173.97	3-31-00	2173.97

The Credits include all dues and donations received during the period. The Debits are all the expenditures during the period, the largest part of which is the cost of printing and mailing the Mailink and Bio pages.

COMMODORE MAILINK POLICIES

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FROM THE EDITORS DESK -- Paul Berry

To produce this issue I used a C=128 in 80 column mode, an 1802A monitor two 1581 and one 1571 disk drives numbered 8, 9 and 10 respectively and my printer was a dot matrix Star NX-1040 Rainbow using a black (reinked) ribbon.

Most of the material submitted for this issue, came in on 5.25" disks in TWS format. Some came as text in email messages and some came as written pages. Since there is no shell account available in the this area I used a PC to receive the email and converted the text as MSDOS ASCII files to PetASCII files using the Big Blue Reader. As most of you know, The Write Stuff handles PetASCII files very easily. That is one of the reasons I prefer, and use, TWS. Where graphics (FGM clip art) appear, I used the Illustrator II version of TWS to fit them into the text.

As the material arrived, I processed it as necessary, made a printout and saved it to a work disk as TWS documents. Producing the final copies was then just a matter of assembling the documents into the Mailink page format.

I want to say a large THANK YOU to all who submitted material for this issue. Without such material, editors would be hard pressed to fill up an issue of Mailink. The interests of our membership is quite varied as this issue attests, and the amount of material is evidence of our members interest in Commodore computing. Later in this issue there are references to surveys of Commodore usage, and while the number of 8-biters appears to be decreasing, we are none-the-less very active.

I want to repeat Jean Nance's appeal to members to volunteer to be an editor. It is not difficult and frankly, I find it quite enjoyable. It offers me the opportunity to communicate with many of you that otherwise might just be a name on the membership list.

The EDITOR FOR THE JULY ISSUE will be David O Mohr.

He can accept, and would prefer, GeoWrite documents.

He can accept GeoWrite documents as attachments to email provided they are in Wraptor V3 or Convert 2.2, 2.5 or 3.1 format.

He can accept text as an email message.

He can accept material on a disk as a PetASCII sequential text.

He can accept material on either 5.25" or 3.5" disks.

Members can log onto his BBS 503-325-2905 and UL a file if they wish.

His mailing address is:

<Sensei> David O. Mohr
A.C.U.G. #447
623 29th Street
Astoria, Oregon 97103

His email address is: ronin@pacifier.com

COMMODORE MAILINK MAY 2000

14 Years of Meeting 64/128 Users Through the Mail

Gary Noakes

In the May 1986 issue of Compute!'s Gazette, the User Group listing for the first time included "The 64 User Group of America", with Kirby Herazy listed as the founder and president. The members of the group (all 35 of them!) corresponded with each other through the mail, but there were no regular group mailings, no newsletter and no dues. In 1987, the group's name was changed to "Meeting 64/128 Users Through the Mail", and Jean Nance became the president. A membership list was started, containing a brief biography of each member, along with their Commodore system components and their computing interests. Later that year, a bi-monthly newsletter was started with the simple, if bland, name of Newsletter, with Jean Nance as the editor. Most of the articles were (and still are) written by the group members themselves, with occasional items of special interest reprinted from outside sources. There were still no dues required for membership in the group, so donations from the members themselves covered the cost of printing and mailing Newsletter. After three issues were published, a contest was held to give the newsletter a more interesting name, and from the suggestions submitted by the group The Commodore Mailink was the standout winner. In 1988 with membership numbers and publishing costs climbing, annual dues of \$5.00 were instituted.

With Commodore users being such a, umm, thrifty bunch, the membership numbers dropped precipitously, but with good word-of-mouth and a steady place in the Commodore user group listings in the popular Commodore magazines, the group membership soon began climbing steadily. It reached a peak of more than 300 in the early 90s. And as the membership grew, so did the membership bio list, the size of The Commodore Mailink itself, the cost of the postage required and, of necessity, the membership dues, to \$9, then \$10, then \$12 (for U.S. members), where it remains today. "Meeting 64/128 Users Through the Mail" has always been a non-profit organization and it relies solely on membership dues and the occasional member donation to continue publication.

In 1994, the combined office of Group President/Mailink Editor was (deservedly) split into two distinct offices. Frank Redmond became the new president, with Jean Nance keeping the "The Commodore Mailink" editor-in-chief position. In 1996 Frank stepped down and Tom Adams became the new group president, with Frank assuming the vice-president's position. Longtime members Brian Vaughan and Rolf Miller maintain the membership records and the group treasury, respectively.

Today, Meeting 64/128 Users Through the Mail has about 165 members. The Commodore Mailink averages 18-20 pages for each issue and is published regularly six times a year (the odd-numbered months). Each issue is edited by a volunteer from the group; the articles, still with only a few exceptions, are written and submitted for publication by members of the group.

Our membership includes users in the United States, Canada, Greece, France and Australia. Some of our members are or have been contributors to such publications as RUN, Compute's Gazette, Loadstar, Loadstar Letter and Commodore World; others are active contributors to the COMP.SYS.CBM and ALT.C64 newsgroups. All of our members love Commodore computing.

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A SURVEY OF THE MEMBERSHIP by Rolf Miller

The stated purpose of the Membership List (AKA the Bio's) is to provide the basis for individual members to communicate with one another. This makes the Membership List the heart of the group. After all, the group is about Meeting 64/128 Users Through The Mail.

Individual communication, though, is not the life blood of the group. Rather, what nourishes all the members is the bi-monthly newsletter of the group: the Commodore MaiLink. The proof of that is seen in the notations accompanying renewal checks. "MaiLink dues" is the most common memo.

The vitality of the group, therefore, depends upon the MaiLink coming from its heart. While the common thread connecting all members is Commodore use, there is a broad range of interests. The contents of the MaiLink, then, must reflect the interests of all its members lest they starve. This requires editors of the MaiLink to strive for well-rounded issues.

Needless to say, members can greatly assist the editors in their task by writing articles about how they accomplish things with their Commodores. Indeed, according to the March 2000 Membership List, no fewer than 5% of the members are engaged in or express an interest in any given computer activity. This means that whatever you are doing with your Commodore, others are doing or interested about learning.

Browsing through the information provided by the Membership List reveals the following.

Half the membership is on line. This is known because they include an e-mail address with their information. The domain name in those addresses tell something else: 50% of the internet users do so with a platform other than Commodore. Yet, the inventory of computer equipment shows heavy commitments to Commodore use.

Those who use or express interest in GEOS constitute a third of the group. And a good number of these GEOS users indicate that it is their primary operating system, citing Wheels, Post Script printing, etc.

Well over 50% mention word processing as an activity. This includes the 15% who specify desk-top publishing and most GEOS users.

Nearly 20% of the membership declare an interest in programming, including BASIC, machine, and other languages.

A similar number express interest in playing games, strategy varieties outnumbering the arcade type.

Other aspects of computing mentioned include music, involvement with genealogy programs, graphic manipulation, data base management, spreadsheets, hardware projects, HAM radio applications, ad infinitum.

* * * * *

LET'S WELCOME A NEW MEMBER

RALPH AMBROSE, 4 B St. Trailer Square, Plant City, FL 33566-2916
Ralph is retired. Hobbies: Stamp collecting, and travel. System: C-64,
1541 disk drive, MPS-802 & Star NX-1000C printers, and a Zenith ZVM-
121 monitor. Interests: Telecommunications, E-mail,
(ambraja@aol.com).

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A RESPONSE TO TOM ADAM'S SUGGESTION From Roger Hoyer

In the March Mailink Tom Adams wondered if there is a way that someone could act as a central clearing house for all Commodore equipment. While that seems like a monumental undertaking for a single individual, it wouldn't be so hard if a number of clubs throughout the country started a program such as our Cincinnati Commodore Computer Club did in the fall of 1996.

As Publicity Director, my name, address and phone number are used as the official contact for our club. In the fall of 1996 we started getting phone calls from people who had downgraded to a Windoze machine and wondered if anyone in our club would be interested in buying their "stuff". We developed a standard answer- "most of our members have several backup computers and disk drives. However, if you would like to contribute your items to the club, we will determine their value in today's dollars and send you a letter giving you the total worth. That way you can deduct the amount from your income tax". If they didn't want to do that immediately, we invited them to bring their items to a club meeting and attempt to sell it. We also told them of our annual Swap Meet in October when they would also be welcome to bring their items for sale at no charge for space. We also give them an idea of what they can expect to get for their items.

Well, the response started as a trickle and gradually built up to a steady influx of items throughout 1997. Since it was my idea, guess who the club decided should keep track of it??? Fortunately for our club, our Vice-president has a nice pole barn on his property that allows us to store all the hardware. He's also our resident repair tech and has a shop in his barn. The rest of the items are stored in my basement (much to my wife's chagrin). It's a good thing I retired in December of 1996, because it turned into almost a full time job to catalog all the donations, create the separate files, copy the disks and send letters to the donors.

We also donate hardware to people who can't afford to buy a computer, but would like to learn. We have a standing invitation in all our meeting notices that we will donate computers to schools and home schoolers. We are currently in contact with an inner city church about loaning them computers. In the past three years we have donated a dozen systems to a local school system which had them for about size months before the parent's association got enough money together to buy that OTHER brand. We have donated systems to three home schoolers and a couple who came to our meetings from out of state. One requirement we stipulate to our donees is that if they should get another computer, we get the Commodores back.

Most of the cartons we use are ones my wife and I accumulate at home. She's a Tupperware manager and I do custom picture framing, so between the two of us there is usually a carton suitable for shipping. Most of them we knock down for storage. We use egg cartons, styrofoam "peanuts", picture frame dust cover trimmings, whatever commercial bubble pack we accumulate and newspaper for packing. The club has had to purchase only a few cartons so far. I have sizes and prices from Staples, Office Max and Organized Living. If I see we will need to buy a carton, we tell the buyer and include it in the shipping charge.

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Over the time period we have been doing this I have recorded the weight of hardware by itself, in it's original carton (when possible) and in cartons we have collected to use for shipping. This way, when we get an order we can tell the buyer how much it will weigh and determine the shipping cost.

We use the USPS because the UPS agents close to me add their own charge to the UPS charge and are therefor more expensive. UPS pick-up is either non-existent because of the small number to ship or is exhorbitant because we don't ship on a regular basis. I have obtained a USPS Official Zone Chart (which tells me which zone to use for shipping from my zip code) and their Mailers Companion Special Rates Issue so that we can tell buyers how much postage will be on their order. Software and printed matter can be shipped using the Book Rate, which is much cheaper than Parcel Post and is the same cost no matter how far it is shipped.

The donations have slowed down in the last eight months or so. We used to get about one a month, and I would create a new set of files each month. Now they come in about once every three months. We got three at March's meeting. We have also received some Amiga items. The last donation of Amiga stuff was big enough that I will now create a separate set of files for it and delete the current items from our regular 8-bit lists.

We now have over 1250 software items, 380 hardware items, 900 accessory items, 150 books, 400 manuals and 4 magazines. Magazines don't stay around very long - as soon as people see there is a long list of magazines, they are bought. The software file is now so big that no Commodore word processor can call the entire file into memory. That's why there are two sequential file readers on the disk we send, the file is read and not retained in memory.

We advertise our items in the Mailink, LOADSTAR's Starboard, on the internet at comp.sys.cbm and on our web site - www.geocities.com/siliconvalley/grid/6412. Most of our sales are generated from the internet and we have shipped items all over the continental United States, Canada, Finland, to a soldier in Germany via an APO Box and Australia.

When we started this program in the fall of 1996 , our club's treasury was down to a mere \$200.00 and we were seriously discussing whether to continue to finance a monthly newsletter that was costing about \$50.00 each month to produce, or to cut it to a bi-monthly or quarterly publication. Since we started selling the items, we don't have that worry any more and our treasury is very healthy!

Getting back to what I originally started to say (FINALLY!), if a number of clubs scattered across the country could figure out how they could do what we're doing, then the shipping costs to get stuff to then wouldn't be so costly and all us Commodore diehards could benefit from it.

If anyone wants more information about how to set up a program like this or copies of my weights and carton measure lists just give me a holler! My phone number is 513/248-0025.

Still more Heavenly Hash from Ed Harler
(Being mainly comments on the March issue of "Mailink")

Tom Adams wrote about a clearing house for C= equipment. Perhaps it would be better to have a coordinator, since there are already several clearing houses. Some have been listed in past issues of "Mailink". Since many do not want to ship large items, the coordinator could perform a valuable service by keeping track of how close a buyer is to the seller of desired large items.

In the March issue on page 12 Rolf Miller wrote: "...a lot of members think a great deal of The Write Stuff (TWS) word processor." And why not? It is easy to learn and use, and has features that many word processors on other platforms still do not have. One feature of TWS which I really miss is the Note (or non-printing). Sometimes I update a disk file for a Family History Sheet from the notes I've made on the printed sheet, but I do not reprint the page(s). (Why print new pages when the information will soon be changed thru additions and/or corrections you've requested?) By adding a note to the disk file I know what I update and when. If I should print the page by mistake (oops, wrong Harler family), all is not lost. I will have an updated sheet, but the note will not appear.

TWS allows the easy creation of accented letters. There is probably a way to do that in a non-C= word processors, but so far I haven't found the method. Which brings up the fact that most C= programs come with a manual, while Wintel programs do not: that information must be purchased separately for another \$20-50! (On-line help isn't all that great.)

So far I have not encountered the TWS bugs/anomalies mention in the March issue. The only quirk I've encountered occurs during two-column printing. If the first column contains an imbedded command (italics, etc.), then graphical characters will print in the second column. This usually causes the line to exceed the right-hand margin and print on the next line in the first column's space. Not only does the page look messy, but the words are garbled and the page's spacing slipshod.

I wrote a BASIC program which displays a blinking cursor immediately after a letter typed. So far I have not figured out how to do the same thing in QBASIC. There are also other BASIC things which are easily done on the C= but require more programming in order to do the same thing in MS-DOS. Try doing a simple calculation on-screen! And in MS-DOS it's impossible to move the cursor to a previous screen line. Oh, if C= only had the sales pitch of an IBM or Microsoft.

A word of caution comes to mind after reading Rolf's article on transferring files between different platforms. Don't do it wholesale as I did! Make a note of which disks have been transferred to the new format or put them in a special place so you know that you've complete your work with them. Try to do the transfers in groups (i.e., all addresses, letters, etc.). Definitely label all of the new disks, if it's only with the general category.

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I enjoyed reading the "Discussion About Printers." Somehow reading the information in print and at one sitting made a much different impression. I'd love to take Rolf's suggestion to go soak my printer's head, but I can't remove the rascal. (Bring on the samari sword!) My Friday Morning Computer Buddy gave me a Panasonic KX-P1123, which (unlike Joe Fenn's printer) works only in DOS. Strangely enough the Panasonic KX-P2023 worked in both DOS and Windows, but I had to go to special pains to get the C= to print in the type face I wanted.

Dick Estel has a good point: "...communication is the bottom line." How to do something on a C= can be described in print, verbally, via e-mail or Morse code. The computer used to generate the words really has nothing to do with the description. Where graphics are concerned, however, a C= should be used in order to show the result which will be gotten. Using "Page Plus" (or another non-C= program) for graphics (other than for decoration) would certainly not be helpful.

C= mentioned in the text on the back of the 1980s series computer stamp. It is also on the backup sheet.

Shortly after computers appeared in the market place, talk of the paperless office emerged, but never materialized. Now there are rumblings of paperless correspondence. There are several things that can't be sent via e-mail (e.g., collectibles), but anything that can be scanned is fair game. Knowing that, I feel certain that there's a C= programmer out there somewhere working on a better Commodore-useable scanner.

Store files in plain ASCII on 3.5" disks then they can be used immediately or after a single move from 5.25" disks or another word processor.

Many of us use e-mail on a daily basis and we're able to communicate with more of our friends as they also get e-mail. This is one of the reasons that Internet traffic is estimated to be doubling in just under 13 weeks. Back in 1969 there were only four (4) Web hosts; and 30 years later there are over 43 million. More amazing is that in 1998 there were an estimated 829 million Web pages. The estimate for 2002 is 7.7 billion pages. I sure hope someone comes up with a very efficient and fast search engine in the next two years, because no one has the time to scan all of those pages.

Statistics make good reading and add to your store of trivia. It took the telephone 38 years to be a fixture in 30% of U.S. households, but it only took TV 17 years to reach the same 30%. The PC hit the mark in just 13 years. And the Web? Well, it made it in less than seven, however, in another three years (2003) it is estimated that the Web will be accessible to at least 50% of all U.S. households.

THE ABACUS & COMMODORE by Rolf L. Miller

The abacus is arguably the oldest counting device in the world. Yet, in spite of its antiquity, the abacus is still used, indeed, preferred by not a few. Its reputation even inspired a software company that produced many very good Commodore programs to chose the name ABACUS.

A full-size abacus consists of a frame containing thirteen column rods. The columns represent one's, ten's, hundred's, and so on. Each column rod holds five bottom beads and two top beads, separated by a cross bar. Each bottom bead represents one within its column's value and each top bead represents five. A bead is counted by moving it towards the cross bar. Thus, the abacus is clear (zero) when all the beads are away from the cross bar.

```
ooooooooooooooooo
ooooooooooooooooo
```

```
=====
```

```
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
```

Counting begins from the right, as usual. So, the number two is placed on the abacus by moving two bottom beads up to the cross bar in the rightmost column. Fifty is added by moving one top bead in the next column left (5 ten's) down to the cross bar. The abacus now shows 52.

```
ooooooooooooooooo
oooooooooooooo o
                o
```

```
=====
```

```
                o
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
ooooooooooooooooo
```

The simple way abacus works allows for very rapid manipulation. In fact, skilled users can produce results on an abacus quicker than what is possible on any keypad device. Think about the example where 50 was added by sliding one bead. To add 50 with keys requires four key presses: the + key, 5, 0, and the = key.

Further speed comes from the way various calculations are accomplished. For instance, whereas adding 8 to the 52 requires three key presses, the abacus user with a single motion pushes one bead up in the ten's column to add 10 while moving two beads down in the one's column to subtract 2 (52 + 10 - 2 is the same as 52 + 8).

By the way, just as spellcheckers can be used to catch miskeyed letters, the abacus can be used to guard against erroneous numeric input. Because values are placed on an abacus in a different way, it's not likely that an error in keying numbers will be duplicated in sliding the beads. Therefore, if the results of a series of entries accomplished on both the keypad and abacus agree, odds are the work is error-free.

Things do not endure just because they work. Rather, they endure because using them is uncomplicated. As seen, the abacus fits that description. So does the Commodore, and that no doubt explains the response given by a Commodore user to an unprintable remark ridiculing his use of a "relic."

"If a thing is no longer useful just because it is old," he posed, "why is the abacus still around?"

In the world of computers, there is nothing easier to use than a Commodore. Nor are there any with less problems. And while it can be argued that its lack of complexity limits what it can do, it, like the abacus, does what it does very well. Indeed, no small number continue to use their Commodores because what these very functional machines do accomplish encompasses most, if not all, of what they do with a computer.

* * * * *

BASIC KNOWLEDGE: Screen Tricks by Gary Noakes

Basic programmers are forever being told, if you need speed, you need to learn machine language. But one of the first things that budding ML programmers are told is to learn to use the built-in ROM routines wherever possible. This leaves the Basic programmer to wonder--WHAT ROM routines?

Basic on any computer can be made more efficient by tapping into the built-in power of the ROMs. This is sometimes referred to as "advanced" or "machine-specific" programming because it utilizes the PEEK, POKE and SYS (or CALL) commands built into the Basic language, but the addresses following these commands are unique to each computer. While this limits the portability of Basic code between computers (a C-64 machine-specific program won't run on a native mode C-128, for example), it optimizes the program for the targeted computer. Some of the machine specific routines are as simple as a single SYS, others require setting up or must be used in conjunction with other routines. This power enables Basic programmers to achieve greater speeds or even perform feats that are impossible with traditional, transportable Basic.

The programming examples presented here are C-64 specific. All of the routines are fully explained so that you can knowledgeably import them into your own programs. This should make them easy for all but the most novice programmer to use. Each line of code has been kept short so that the examples can be more easily understood. This slows down execution time somewhat but the learning aspect takes precedence.

Type in Screen Trick 1.1 and run it. It's a loop that pokes a reversed space to every screen location in each of the sixteen colors:

```
10 rem:screen trick 1.1:fill with poke
20 a=1024:b=2023:c=160:o=55296-a
30 printchr$(147)
40 ford=0to15:fori=atob
50 pokeo+i,d:pokei,c
60 next:next
```

This is one of the most time-intensive programs in Basic. Even though all literal numbers are converted to variables to make it as fast as possible, this routine still takes 120 seconds to complete. Now type in and run Screen Trick 1.2:

```
10 rem:screen trick 1.2:fast fill
20 a=1024:b=1063:c=160:o=55296-a
30 hi=int(a/256):lo=aand255
40 printchr$(147)
50 ford=0to15
60 fori=atob:pokeo+i,d:pokei,c:next
70 fori=1to24
80 poke781,i:poke782,0:sys58636
90 poke780,hi:poke172,lo:sys59848
100 next:next
```

Although it takes more code to set it up, the end result is essentially the same as Screen Trick 1.1 but takes only 20 seconds to complete!

While most of Screen Trick 1.2 is generic Basic, some of it may be unfamiliar. Line 30 contains the calculations to figure the high byte (hi) and low byte (lo) of address 1024 (a). Lines 80 and 90 contain routines that tap directly into the Kernal ROM and require some explanation.

The screen consists of a grid of 1000 locations (0-999). The rows (lines) are numbered 0-24, the columns are numbered 0-39. Locations 781 and 782 are the .X and .Y registers, respectively. Poking these locations is the same as LDX and LDY in ML. The PLOT (or PRINT AT) routine in line 70 uses these locations to position the cursor. This means that the cursor can be placed anywhere on the screen and your text printed with the syntax:

```
poke781,(Row):poke782,(Column):sys58636:print"Text"
```

Location 58634 is the documented Read/Set Cursor entry point. By poking the X/Y values ourselves, we can bypass STX and STY (SToreX and SToreY, the first two bytes of Read/Set Cursor) and then jump directly into the routine where needed.

Line 90 pokes the high byte of the screen address into location 780 (equivalent to LDA, Load Accumulator) and the low byte into location 172 (the work pointer for the Screen Scroll routine) then calls the Move Screen Line at location 59848 to take 40 bytes from the indicated screen position and copy it to the current cursor position.

Move Screen Line is used by the operating system (OS) whenever lines are scrolled on the screen (such as when listing a program). By using Plot to control the cursor position and Move Screen Line together, the screen fills in a fraction of the time it takes normal Basic.

As a complement to Move Screen Line, type in and run Screen Trick 1.3:

```
10 rem:screen trick 1.3:fast fill & clr
20 a=1024:b=1063:c=160:o=55296-a
30 hi=int(a/256):lo=aand255
40 printchr$(147):poke782,0
50 ford=0to15
60 fori=atob:pokeo+i,d:pokei,c:next
70 fori=1to24
80 poke781,i:sys58636
90 poke780,hi:poke172,lo:sys59848
100 next
110 fori=24to0step-1
120 poke781,i:sys59903:next
130 next
```

Notice the last statement in line 40--since the value in 782 will remain constant throughout the operation, we can move it out of the loop. Location 58636 in line 80 references the value in 782, using one less operation and further speeding up loop execution time.

The Clear Screen Line routine in line 120 clears the entire line (columns 0-39) at the position indicated by Plot. Now try Screen Trick 1.4:

```
10 rem:screen trick 1.4:fast fill & hlfclr
20 a=1024:b=1063:c=160:o=55296-a
30 hi=int(a/256):lo=aand255
40 printchr$(147):poke782,19
50 ford=0to15
60 fori=atob:pokeo+i,d:pokei,c:next
70 fori=1to24
80 poke781,i:sys58636
90 poke780,hi:poke172,lo:sys59848
100 next
110 fori=24to0step-1
120 poke781,i:poke782,19:sys59905:next
130 next
```

By poking a new value (19) into 782 in line 40 (again, keeping it out of the loop) and then jumping into the Clear Screen Line routine at address 59905, the row is now cleared ONLY from column 0 to the value in 782. Although these examples use a loop to clear the screen, either can be used to clear any number of full or partial lines.

When printing characters to the fortieth screen column, the cursor "wraps around" at the end of the display, switching from 40-column screen (display) lines to 80-column logical (programming) lines. The addition of a semicolon at the end of a 40-character line of screen output allows using the far right column, but subsequent printing to the screen can sometimes be unpredictable.

Screen Trick 1.5 demonstrates the problem by printing a 40-column background with a box overlaid on it. Type it in and run it:

```
10 rem:screen trick 1.5:corrupted print
20 l$="[40 *]"
30 b$="[rvs on][18 spaces]"
40 printchr$(147);
50 fori=1to24:printl$;:next
60 print"[home][6 cursor downs]";
70 fori=1to4:printtab(11)b$:next
```

The only way to cure the problem is by resetting the line links. This can be done individually for each offending line or they can all be reset from within a loop. Now type in and run this program:

```
10 rem:screen trick 1.6:corrected print
20 a=217:b=242:c=128
30 l$="[40 *]"
40 b$="[rvs on][18 spaces]"
50 printchr$(147);
60 fori=1to24:printl$;:next
70 fori=atob:pokei,peek(i)or128:next
80 print"[home][6 cursor downs]";
90 fori=1to4:printtab(11)b$:next
```

The Line Link Table runs from locations 217 to 242 (variables A and B). The table is reset in line 70.

By using the Line Link Table in conjunction with three other ROM routines, we can do something that seems impossible in Basic. Type in Screen Trick 1.7, press Run/Stop-Restore, list the program and then run it:

```
10 rem:screen trick 1.7:screen bob
20 a=217:b=242:c=128
30 forl=1to5
40 fori=1to10:sys58726:sys59749:next
50 fori=atob:pokei,peek(i)orc:next
60 fori=1to10:sys59626:next
70 next
```

Here are what the SYS addresses in lines 40 and 60 do:

```
SYS 58726 = Home the cursor
SYS 59749 = Insert a blank line
SYS 59626 = Scroll the screen
```

The Line Link Table is reset after inserting each new line at the Home position to restore 40-column screen integrity. Without it, the OS gets VERY confused about where the cursor is supposed to be (put a REM in front of line 50, rerun the program and see for yourself). While this example would come under the heading of "stupid screen tricks", it illustrates some useful techniques.

Here's the same program with a small ML program used to clear the line links:

```
10 rem:screen trick 1.8:screen bob w/ml
20 fori=49152to49165:reada:pokei,a:next
30 forl=1to5
40 fori=1to10:sys58726:sys59749:next
50 sys49152
60 fori=1to10:sys59626:next
70 next
80 data 162,0,181,217,9,128,149,217,232,224,25,208,245,96
```

The machine language routine is short enough to be included in the program itself, rather than being loaded from disk. It's also relocatable to anywhere you have 14 bytes of free space.

Screen Trick 2.0 is a program that uses previously described examples and some new code to demonstrate various ways of wiping (clearing) the screen. Unfortunately, it's far too long to publish as a type-in, but it will be available on the Mailink disk for this issue.

If you have any suggestions for future Basic programming subjects or any questions, I can be reached by snailmail or email.

* * * * *

LETTERS TO THE EDITOR

Dear Mailink Editor,

Dick Estel describes a condition where TWS-128 crashes occur when using macros. This might not be his problem, but I have found a hang-up problem that exists with TWS-128, Illustrator I and II.

First, amending macros, if they are to be saved, must be the only text on the screen. On a new screen, press Control Shift M. Scroll to where you want your new macro to appear. Press Control i to activate the insert mode. Add your macro at the place just below where you want it. The item there will be pushed ahead of your new macro. When through, press return and the old item will jump the the position just under the new entry. Press Control s and the amended macros will be saved to the disk.

Now the trick to using macros which doesn't appear in the manual: Macros will not go into the first line of a text. I usually start my text with a note (Control n). After that, press Control m and that turns on the macros. Press the macro defined on the left of the equals sign and press space bar. The macro will be printed on the screen.

I, too, had problems with the macros hanging up the program until I discovered that using the first line is a no-no. If you want the macro to be in the first line, you can put a return in the first line, then your macro and then go to the first line and delete the return. That will put the macro on the first line.

W. R. Kennedy

COMMODORE MAILINK MAY 2000

In the last issue, Rolf Miller offered a good suggestion for keeping power supplies cool by placing them on top of the metal shield from an old 1541 drive; however, not everyone has room on their work area to accommodate the large shield. For many years, I have used a solid steel 2"x4 1/2" bucking block found at hardware stores to place under my power supply. It elevates it and acts as a great heat sink for keeping the power supply much cooler. And for many years, I have operated my 1541 drive with its top cover and metal shield removed so the drive operates cooler. When not in use, I cover the exposed drive with a dish towel. Rolf also said that he cleaned his drive R/W head with 91% isopropyl alcohol. I recommend using a Q-Tip dipped in 190 proof completely denatured alcohol as it does not leave a film on the head. At my pharmacy, I have to ask the pharmacist for a pint bottle of this product as it is not on the store shelves.

Brian Vaughan

* * * * *

In the March 2000 issue, I stated an ongoing problem I was experiencing with my TWS 128 BB Speller. Many correctly spelled words (all with a v in them) were being identified as misspelled. I was blaming the dictionary. Larry Holiday was kind enough to send me a known good dictionary disk. He also gave me a couple suggestions to try if the problem persisted. I found my problem to be my working copy of the BB Speller program disk (all three copies). When I used my original program disk, I had no problem. Made new working copy and now all is well. THANK YOU Larry Holiday.

Arvid Nelson.

* * * * *

Many thanks to Rolf for his answers to some of my questions about JPEG in the March Mailink. Also many thanks to our member John Guillory, who also sent me a long letter about JPEG and some other graphic files. I don't know if I will ever understand it all. It is difficult (\$) to decide whether to get into the digital camera fad, so I will wait until I do understand.

I have another question about Illustrator both I and II. They both have a "Help" screen which has some "miserable colors". Light green on light grey just do not have enough contrast. My TWS, 80-column disk has the same screen but has much better green on black. I have had no success in trying to save the "bb cust" program from TWS to Illustrator. When tried, program (Illustrator) will not load. (I did this on a scratch disk so I haven't lost anything). Where in Illustrator are the color vectors for the help screens? I have spent a lot of time looking, but it is beyond me. Any help?

W. R. Kennedy,

* * * * *

Mary Spink would like information on where to obtain ribbons for her MPS 801 printer, and how to use the MPS 801 printer with Printmaster.

Mary Spink P.O. Box 322 Three Rivers, MA 01080-0322

COMMODORE MAILINK MAY 2000

FROM THE MAILINK ON DISK EDITORS CORNER! by Richard Savoy

COLLECTION COMPLETE: I now have a complete collection of the "Mailink on Disk" thanks to William Haleen, Ken Barskey, Zen Coylmuck and the efforts of Tom Adams to obtain from Fred Knerr's daughter some of the material from his estate and Jean Nance effort to steer me in the right direction to obtain the missing disks. Now all the back issues are available for one dollar each postpaid, some of the early issues are Mailink text without added public domain programs and grouped together on a single disk. Double sided disks are used for the copies, if you are interested check with me first and I'll send a list.

WHAT'S NEW FOR MAY: Gary Noakes "Font Mangler" program (article elsewhere in this issue) will take up most of the back side of the Commodore Mailink on Disk May issue, but we are having a FREE BONUS 5.25" DISK with C-64 programs. Many of the programs on this disk are from 1993 disks of the month from Melbourne Commodore Computer Club (M.C.C.C.) in Australia the largest group in that country, I took an assortment from their February through April, 1993 plus some other programs.

SUBSCRIBE TO THE COMMODORE MAILINK on DISK: If you aren't a subscriber you don't have to wait till January, you can start anytime and you will receive the current issue and the latest bonus issue and the next five issues, which are mailed about two weeks after the current Mailink newsletter is mailed.

PRICES FOR THE COMMODORE MAILINK on DISK ARE AS FOLLOWS:

\$7.50/year in US.	\$8.70/year in Canada
\$10.00/year every where else U.S.A. Funds only.	\$1.50 single back copies

PAYABLE TO: RICHARD SAVOY, 250 WEST STREET # 9, WARE, MA 01082-9783

* * * * *

Exclusive on the MAILINK ON DISK: FONT MANGLER by Gary Noakes

A new C-64 program on this issue's Mailink On Disk is Font Mangler a utility for manipulating character sets en masse, for copying characters between character sets, and for doing other character set tasks that sometimes need to be done, but that most font editors don't handle well, if they attempt to handle them at all. Font Mangler is not a font editor but is designed to work in conjunction with one. If you do any work with fonts, font editors, or do any programming that uses redefin characters, you can probably find something useful in the program.

The main program itself is compiled, but the full commented source code is included on the disk, as is the commented source code for the program that was written to generate the eight help screens that are loaded by Font Mangler (they live under the Basic ROM and are accessed through video bank switching, so you may find the techniques involved interesting and/or instructional). Also included is a program to generate a chart of the screen codes of the Commodore character set (80-column printer only) and twenty-five fonts to experiment with.

Truth in Labeling Statement: Font Mangler is very loosely based upon and a totally rewritten, much-enhanced version of, Font Man (Font Manipulator), a program that I contributed to the old Cee64 Alive! disk magazine many years ago. If some of the options in Font Mangler seem familiar, you may be one of the dozen or so people on the entire planet that has actually SEEN Font Man. You have my apologies.

About the name: If you had seen what this program did to a font during the early stages of development, you wouldn't ask.

* * * * *

A SURVEY OF COMMODORE USERS. by Paul Berry

Cameron Kaiser, in conjunction with Computer Workshops, Inc. has sponsored a very comprehensive survey of Commodore users throughout the world that was available to those Commodore users who have access to the Internet. As of late February, 275 Commodore users had completed the questionnaire via the Internet, and Cameron wrote the following brief summary of the results to date:

2000 Commodore 8-bit Users Survey Results

Sponsored by Computer Workshops, Inc.

The Big Picture: Here's what the survey says in a nutshell.

The average Commodore 8-bit user of today is male, aged 28-31, lives either in North America or Europe and got his first Commodore 13 to 14 years ago. He owns four to seven Commodore 8-bit computers of varying kinds, and anywhere up to six other computers besides. He owns between five and eight disk drives, and probably has a couple of datasets too, and about four to 6 joysticks. He primarily uses BASIC as his operating system, and uses a PC or other kind of "more modern" computer to access the Internet. He probably uses an emulator of some sort. His Commodore is not his primary computer, but when he is using it, it's most likely for games or, less likely, programming and actual work.

The complete summary of the survey can be seen at

<http://www.armory.com/~spectre/cwi/survey.html>

Since this survey was conducted on the Internet, I obtained Cameron's permission to copy it and include it in this Mailink issue for those of you who don't have internet access. The survey appears as the last two pages of this issue, which you can complete, remove and send to Cameron so that the survey can be expanded to include information from Commodore users who are not on the Internet.

When a new (updated) summary is available, I am sure it will be included in a future issue of Mailink.

FOR SALE OR TRADE

I have a bunch of Compute Gazette and RUN magazines that I no longer have any interest for. A total of 63 full issues and 38 issues of the Commodore section only of Compute when it was part of the Compute magazine. I have the Compute Gazette disks for Aug-87 thru Jul-89 except Jul-88.

I would like to sell all of the above for a fair price but I do not want to go to the trouble of packaging and shipping them. I will meet anyone within 100 miles of Texarkana, TX and exchange them for the above stated fair price. If nobody is that near, I would consider having them packaged and shipped but the fair price would go up somewhat.

e-mail me or call 903-667-2839 if you are interested. I also have an assortment of software.
If interested, e-mail me at: big-train@att.net

Walter Johnson.

* * * * *

The Cincinnati Commodore Computer Club has a LOT of used commercial software for sale at very reasonable prices. The club also has lots of used computers, disk drives, monitors, some printers, books and accessories at bargain prices. Because of the low prices, postage will be appreciated.

1. Send a floppy mailer with your return postage and address for separate lists provided on a 5-1/4" floppy disk as sequential files. The files can be accessed directly using sequential file readers on the same disk. or;

2. Send SASE for copies of the lists for Commodore hardware, software, accessories and books on individual lists; to:
Cincinnati Commodore Computer Club
c/o Roger Hoyer
31 Potowatomie Trail
Milford, OH 45150
phone: 513/248-0025

* * * * *

For Sale by Roger Dettalle

Koala Pad \$20
Symphony Stereo Cartridge \$12
2-drive 21 sec copier/cable \$12

Shipping included - money order only

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Cameron Kaiser's Commodore 8-bit Users Survey - Mailink Version

Please complete the above questionnaire and return it to:

Cameron Kaiser
Computer Workshops, Inc.
3612 Birdie Drive
La Mesa, CA 91941-8044

Directions: Please answer all questions as accurately as possible.
Enter appropriate word, number or checkmark in the blanks.

What is your Gender? Male Female
What is your Age? _____ How many years ago did you get your first C= ? _____
Your geographical area: Europe Asia N. America
 S. America Africa Australiasia

What Commodore 8-bit equipment do you own (indicate number)?
 KIM-1 or clone SX-64 Plus/4 2000 Series PET
 64 16 Educator/Pet 64 3000 Series PET
 64C Flat 128 Other 264 4000 Series PET
 64G 128D 65 8000 Series PET
 64GS VIC-20 Other C= 8-bit (Name) _____

What other Commodores do you own (indicate number)?
 Any Commodore PC Amiga 500,2000 Amiga 600,1200
 CBM 900 CDTV CD32
 Amiga 1000 Amiga 3000 Amiga 4000
 Other Commodore Computers - name _____

What Commodore 8-bit-series peripherals do you own (indicate number)?
Disk Drives: 1540 1541 (brown) 1541C 1541 II
 1551 1571 (not 128D) 1581 2031
 4040 8050 8250 SFD-1001
Datasets: 1530 Plus/4 Dataset C2N Dataset
Monitors: 1701 1702 CM-141 1802
 1901 1902 1902A 1084
Printers: 1520 1525 1526 MPS-801
 MPS-802 MPS-803 MPS-1000
Mouse: 1350 1351
REU: 1700 1750 1764
Modems: 1660/1670 VICMODEM
 Other C= peripherals (name) _____

Third party peripherals (do not include fastloaders or utility cartridges).
 Joystick Any dataset clone
Modems: Any C= compatible Any requiring RS232 converter
Accelerators: Turbomaster Flash8 SuperCPU Other
Light pen: Flexidraw Edumate Koala Other
Touch Pads: Koala Animation Station Other
REUs: geoRAM BBGRAM Quick Brown Box
 CMD RAMlink Any C=REU clone Other
Hard Drives: Lt. Kernal CMD HD Other
Disk Drives: Enhancer 2000 FSD Excelerator Indus GT MSD single
 MSD dual CMD FD-22000 CMD FD-4000 Other
Mouse: Datex M3 Other
Printers: Okimate 10 Okimate 20 Any C= compatible Okidata
 Star NX-10C Star NX-1000C Other (no interface)
Interfaces: Xetec Super Graphics or Super Graphics Jr. geoCable
 Cardco +G Other Cardco Other

Utility cartridges, fastloaders and hardware upgrades.

- Epyx fastload Super Snapshot (5 or lower)
- CMD JiffyDOS Super Snapshot 5
- Dolphin DOS Access Mach 5 for C= 64
- Final Cartridge I or II Access Mach 5 for C= 128
- Final Cartridge III Cinemaware Warpspeed
- Action Replay (5 or lower) Timeworks Partner 128
- Action Replay 5

What Commodore operating systems do you run? (Basic assumed :))

- Wheels CP/M 2.2 OS/A65 Clips
- CMD Gateway CP/M Plus 3 CS-DOS
- GEOS (2.0 or lower) LUnix Asterix

Which do you prefer? _____

Other computers you own (Do not include Amigas)

- Any Intel PC Any Texas Instruments TI-99 series
- Any Macintosh or clone Tomy Tutor
- Any Apple II including IIgs Any MSX, MSX+ or MSX2 (No consoles)
- Any Sinclair Computer Tandy Colour Computer
- Any Atari 8-bit (except games) Any Tandy TRS (Except Colour)
- Any Atari ST Any natively CP/M based system (Cromemco, Kaypro etc.)

Mark the ways you access the Internet

- America Online PPP/SLIP from PC to generic provider
- Cable modem service Shell access from PC to generic provider
- DSL service Shell access from C= to generic provider
- Direct Ethernet to IAN PPP/SLIP from C= to generic provider

Mark the emulators you use

- No Emulator Frodo on Unix CCS64 on DOS
- VICE on Unix Frodo on Amiga CCS64 on Win32
- VICE on Win32 Frodo on Mac C64S
- VICE on other platform Frodo on BeOS PC64
- Power 64 on Mac Frodo on Win32 A64
- Minus 4 G064 (not the magazine)

What publications do you subscribe to?

- Loadstar Loadstar letter G064 Commodore Gazette
- Other (list) _____

What do you use your Commodore 8-bit for?

- Games Music
- Educational/teaching Programming and development
- Word processing, productivity Internet Access
- Graphics

- Is your Commodore 8-bit your primary system? Yes No
- Would you buy new Commodore 8-bit software? Yes No
- Would you buy new Commodore 8-bit hardware? Yes No

The last question!

- * Additional comments, hardware I didn't cover, suggestions, etc:
- * Enclose any non-returnable photos, clippings, etc. that may apply