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MEETING NEWS
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by
Tom Adams, President

WELCOME TO ALL THE RETURNING MEMBERS!

I have a confession to make. Meeting News in the January issue was not written by me. The article was written by Jean Nance. I was under the weather with the flu when it came time to write my bit of prose. I want to thank Jean Nance for stepping in and doing a great job while I was in bed taking cough meds.

The group seems to be running a bit behind with renewals. As of this writing there are about 155 members that have renewed. This is down from the 235 members that the group had at the end of the year. My guess is that many are turning to the Windows machines and the Commodore computers are being put in the attic, basement or the dumpster. I have heard recently that some Commodore owners are moving on to another platform and are wondering what to do about their computers.

I wonder if there is some way that someone could act as a central clearing house for all the Commodore equipment? And do those that are still interested in our beloved Commodore computers have a single place to get parts or other equipment? I myself am looking for a monitor as I have four that do not work and no place to get them fixed locally. It would be great to have such a place, but wonder if it is even doable? It would take a lot of dedication not to mention the work involved.

Are there any answers to these questions? I would like to hear what others are doing to keep their computers working. Let's hear your suggestions or comments.

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TREASURER'S REPORT

From: Rolf L. Miller, Treasurer

Following is a summary of the Trust Account as of January 31, 2000.

Balance			
11-30-99	$1845.03	1-1-99	$2924.42
Credits	987.00		2732.00
Debits	362.00		3050.39
1-31-00	2470.03	12-31-99	2606.03

The Credits include all dues and donations received during the period. The Debits are all the expenditures during the period (including advances), the largest part of which is the cost of printing and mailing the MaiLink.

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TO PRODUCE THIS ISSUE
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Production of pages for this issue utilized a stock 64 and 1541 drive running The Write Stuff to edit the text and the Fun Graphics Machine for the graphics. Most of the text is the product of printing on a Citizen Premier 35 daisywheel printer using carbon film ribbon. Text involving graphic characters came from a Star NX-1000C. The Star also produced the graphics by over-printing them with a second pass in the space planned. Two-pass printing allows a great deal of flexibility in the placement of material.

It is noted that most of the work accomplished at this desk involves text. The reason an unexpanded 64 remains the primary computer system in this office is simply because another system has yet to demonstrate faster overall results. Consequently, as bigger PC's invade these premises, they are assigned specific tasks as slaves to the Commodore.

A large THANK YOU is extended to Jean Nance, Tom Adams, Brian Vaughan, and every one who supplied material for this issue. Without this participation, the MaiLink would not happen.

The editing of articles sought to allow the inclusion of all submitted material within the page format desired while retaining informative content. The clear manner in which the writers presented their thoughts greatly aided this effort. The issue also includes excerpted material edited and compiled from numerous different sources which appears without by-lines.

MAY EDITOR

Paul Berry will be the editor of the May MaiLink. He can handle submissions in most any form, but prefers they be on a disk (either 5.25" or 3.5") in TWS format or via email. Submissions deadline is April 21th. Send to:

Paul Berry
2113 Seven Lakes South
Seven Lakes, NC 27376
email: pdberry@pinehurst.net

EDITOR'S DESK
Rolf L. Miller

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EDITORS NEEDED

From: Jean P. Nance
Managing Editor

As you see, Paul Berry has once again volunteered to edit the May Commodore MaiLink. We still need editors for the July, September, and November issues. Paul, and Rolf Miller, the editor of this issue, have served several times in the past and stand ready to edit again in emergencies. I would prefer that there be more different editors, people who have never edited before.

A lot of you list "Desktop Publishing" as one of your interests. Here is an opportunity to use your skills. Enough good material usually comes in from members to fill a 20 page issue. Tom Adams takes care of getting the master copy you send him photocopied and mailed out. The duties of the editor are to receive submissions, choose the best if there are too many for the space, arrange them into a newsletter, print up a copy and mail it to me. I will proofread it and send it along to Tom. The time required is a couple of hours a week when material is coming in, then several hours after the deadline, to put the issue together.

It is possible for two people to share the responsibility. One person receives the material, edits it if necessary, and sends it on disk to the second person. That person arranges it, adds graphics if they wish, and prints out the copy. This can work well, even if they live far apart and correspond by letter or Email.

I can send you a three page "Editor's Guide" which explains all the necessary steps. I am always available by mail or Email to advise.

PLEASE, won't somebody volunteer?
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Regarding Jean's appeal, consider this. The mechanics in doing a 20-page newsletter need not be any different than in producing 20 one-page newsletters.

Letter to the Editor
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from Dick Estel

When I volunteered to edit the January MaiLink for the last two years, I was reminded to use only Commodore equipment. It seems some members frown on using anything else to produce a Commodore newsletter.

I have a few comments and questions. Did any of you subscribe to Run, Compute's Gazette, or Commodore World? None of these were produced on a Commodore.

How stringent is this requirement? Obviously it does not apply to printers. We are permitted by these guardians of Commodore purity to use ink jet and even laser printers, none of which bear the Commodore brand.

Part of the reasoning behind this is that we are showing readers what can be done with a Commodore. So what exactly tells us when we look at a newsletter that it was done on a Commodore? If it's done with a laser or ink jet, I defy anyone to tell what machine sent the ASCII code to the printer. Could I cheat by doing it on my PC, but making it look "bad"?

My point is, communication is the bottom line. If we are presenting useful, well-written material that helps people use their machines better, shouldn't we use the tools with which we are most comfortable and which let us do the best job possible?

A RESPONSE FROM THE EDITOR

I am one who frowns on using other than a Commodore computer to produce a Commodore newsletter. My reasoning is that the MaiLink, unlike Run, etc., is solely an information organ. And, yes, part of the information it imparts is showing readers what can be done with a Commodore.

Can a reader tell from what computer the newsletter came if it's done on an ink jet or laser? When it comes to straight text, probably not, though graphics are another story. However, that's not all there is to it. Part of the information is just how the Commodore accomplished the printing. If a Commodore is not used, that information cannot be imparted, whether mentioned in the issue or requested by an interested reader after the fact.

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MAILINK on DISK
BY RICHARD SAVOY, EDITOR

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FROM THE DISK EDITOR'S CORNER!
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I'd like to take this space each month, if for no other reason than to advertise the fact that you can now order the disk edition any time during the year and it will go for the next 6 issues. Of course, if the club jacks-up my cost for advertising, that will be the end of that!

We have the disk in two sizes: 3.5" for use with 1581 or FD-2000 disk drives, and 5.25" for use on 1541 or 1571 disk drives. In answer to questions about this, it makes no difference to me which format you want.

You who are subscribers of the disk version, how did you like the surprise of receiving three disks last month? Aren't you happy you joined our group? I hope so! More surprises as the year wears on!

You can still get the two disks of Commodore Gazette (a monthly disk magazine available on two 5.25" disks or one 3.5" disk which member Chris Ryan has been publishing for a full 4 years now) if you subscribe to the MaiLink on disk NOW. But act quickly and let me know if you want to start with the January or March MaiLink.

I had a telephone call from Jim Green, the disk editor before Fred Knerr. I have been looking at some of the disks he made for the club from March 1991 to September 1994. Jim is so ill now days that he can only do physical work for very short periods of time.

MAILINK on DISK
MARCH 2000

LETTER TO THE MARCH MAILINK EDITOR

Re: JPEG file on the November MaiLink Disc

     I was able to use the JPEG file on
the November MaiLink Disc to get an image
(shaky) on the monitor. Then I used
Snapshot V5 to get a small, medium and
large printout on my Star 2420 printer.
When I printed them out, no two looked
alike (exactly). I assume this is
because the image is shaky.

               Some questions:

     What is the difference in a JPEG file
and the following: GIF files, EPS files,
TIFF files?
     Is a JPEG file made with a P.C. the
same as one made with a Mackintosh? Is
a JPEG file what is stored in a digital
camera memory? Is it what comes from a
scanner?
     What "Idiot" book do I need to read?
     Why do I need to unzip ZIP files?
     What relationship do ZIP files have
to JPEG files?

Sincerely yours,
W. R. Kennedy,

Dear Bill,

     As I noted in the January MaiLink,
I know nothing about JPEG images. So,
I am not the one who can answer the JPEG
questions. Hopefully another will come
forth who better understands the subject.

     As for why ZIP files must be unzipped,
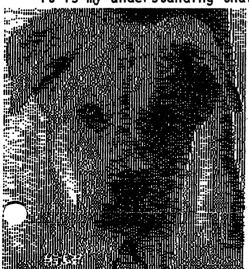it is my understanding that a zipped file
consists of several individual files
compressed and "zipped" together into one
file for transmission purposes. Unzipping
decompresses and recreates the individual
files. This procedure is used on all sorts
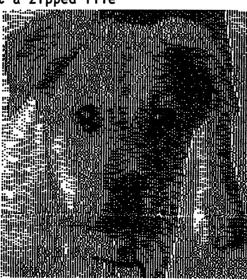of files including program and JPEG files.

     As for why the images you captured
with Snapshot do not look the same, I
suggested in the January issue that the
reason has to do with the Commodore's 8-bit
resolution limitations. But while the 64
cannot generate a resolution higher than
8 x 8 pixels, the monitor can display
higher resolution. All one has to do is
hook a VCR to it to see that. So, for a
64 to display pictures with a resolution
higher than 8 x 8 pixels is merely a matter
of programming.
     I don't know the particulars, but the
Programmer's Reference Guide tells how the
display can be manipulated to display two
or more different images on the screen
simultaneously. Done right, it would
appear as one image to the eye, though a
slight flicker might be seen. Yet, there
are really two or more separate images,
and those separate images are what can
be captured.
     What appears below are two separate
images of the pup JPEG as captured with
the Fun Graphics Machine (FGM). The third
image is the result of superimposing the
two on top of one another using the OR
function in FGM with one image shifted
one pixel right. Of course, it still
exists as an 8-pixel image, but gives
an idea of what occurs when the two
are displayed simultaneously.

Editor

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From: Arvid Nelson

Re: COMMODORE WORLD MAGAZINE

Commodore World magazine, formerly published by CMD, is now published by CSW Verlag, publisher of GO64! magazine in Germany. They now publish an English version known as GO64!/Commodore World.

The last issue of Commodore World was #25 dated March 1999. Subscribers should have already received the new magazine. You will receive issues of GO64!/Commodore World to replace each remaining issue of your paid subscription to Commodore World.

The first issue of GO64!/Commodore World I received was the 8/1999 (August 1999) issue in late November 1999.

NOTICE: The editor's news of issue 8/1999 stated their renewal policy. To drop your subscription, you have to notify them. If you don't, they will renew your subscription automatically for five months at $29.95. If you still do not notify them, they will automatically renew your subscription for one year at $74. Their Email address is: go64@c64.org

(Note: A legal agreement cannot be created in the U.S. by no response. Unless agreed to previously by response, failure to notify does not bind the recipient. -- Editor)

Question about TWS128

I have been putting up with a quirk when spell checking documents using my C128 version of The Write Stuff BB Speller. I have serial #286009. Maybe others have the same problem or maybe there is a fix.

Many correctly spelled words like deliver, discover, fever, forever, government, recover, silver, whatever, are listed suggesting they are misspelled. The listed words all have an upper case V in them. If you spell the word with an upper case V, it still identifies the word as misspelled. When I look at the dictionary modules the words in fact erroneously have an upper case V in them.

I did copy my original BB Speller disk to a 1571 formatted disk. I keep the BB Speller disk (w/dictionary) in drive 8 and data disk in drive 9. I tried the original disk with the same negative results.

Any comments, suggestions? Arvid Nelson, Email: arne123@webtv.net

***** ***** *****

From: Bruce Thomas

Re: LAST LOADSTAR LETTER

I sent in my renewal fee for The Loadstar Letter and got this response:

From: "Judi Mangham" <judi@loadstar.com>
To: Bruce Thomas <rbthomas@edmc.net>
Date: Thu, 16 Dec 1999
Subject: Re: Issue #75

Hi Bruce,
<snip> I am also returning your money order because #76 will be the last LOADSTAR Letter. This is a very abrupt decision. We are not making any money on it and we have let the quality go down.

From: Scott Parker

Re: HARDWARE NEEDS / FREE CATALOG

In addition to numerous software titles, Centsible Software's latest catalog lists printer ribbons, blank disks, various cables, and a large selection of used equipment including monitors, disk drives, printers, computers. (See ad on page 20)

From: Rolf Miller

Re: KEEPING POWER SUPPLIES COOL

An oft heard truth is that heat kills electronic components. Many Commodore 64 users have learned this the hard way with failure of that "brick" power supply. If you have a nonworking 1541 disk drive lying around, it contains an item which could prevent future power supply hard times.

Inside the disk drive is a metal shield covering the motherboard. This shield is held in place by just two small screws and is easily removed. Taking it out and using it as a pedestal upon which to set that "brick" will produce a big drop in the temperature of the power supply.

First, it raises the supply up to allow air to circulate under it. Second, the metal acts as a heat sink to draw away heat from the power supply's case. And the effectiveness of this is enhanced because the shield is made of perforated metal, allowing air to circulate through it.

***** ***** *****

BASIC KNOWLEDGE: Writing Bad Code   by Gary Noakes

I see a lot of bad code (heck, I WRITE a lot of bad code). Early Commodore programs are rife with it. The C-64 was new, so few programmers knew enough about Commodore Basic to really make it shine. But that was then. This is now.

When I download a program, I try to list it to see what I can learn. This doesn't work on programs written in Assembly or compiled. But compiled programs can often be decompiled, though I run them first to see if it's worth the effort. Few are, and those are usually a mass of cycle-wasting code, compiled only to make the execution speed bearable. This is the primary reason Commodore Basic has such a reputation for sloth. But it's usually not the language, it's the programmer's use of it.

All programmers have written some bad code (does the name Microsoft ring a bell?). It's nothing to be ashamed of. In the heat of programming passion, routines are tried and discarded until the program works as intended. Then you save it. But that should be only the beginning. Crunching and optimizing the working routine is (or should be) the next step: remove lines or commands no longer used, combine lines that can be combined, and look for code that can be better written to take fewer bytes or run faster.

I recently took a peek into some code that came my way and was amazed by what I saw:

```
30 b$(0)="*":b$(1)="**":b$(2)="***":b$(3)="****":b$(4)="*****"
40 b$(5)="******":b$(6)="*******":b$(7)="********":b$(8)="*********"
50 b$(9)="**********":b$(10)="***********":b$(11)="************"
60 b$(12)="*************"
```

This is a terrific example of bad code. If you look at the arrays carefully, there is a straightforward progression going on: each array element has one more character than the last. Instead of four lines of code, this can be more easily be done in one. Either of these lines would work, and work better:

```
30 b$="*************":fori=0to12:b$(i)=left$(b$,i+1):next
```

```
30 fori=0to12:b$(i)=left$("*************",i+1):next
```

So little typing, so much more efficient. The second example is better since it doesn't assign a variable that may not be used again, and is five characters shorter.

Below is another good (bad) example of arrays. For the purpose of illustrating control characters here, I'll use [r] for reverse on, [e] for white and [g] for gray:

```
60 c$="[g]"
80 a$(2)=c$+"[r] [e] XXXXXXXXXX "+c$+"[r] "
90 a$(3)=c$+"[r] [e] xxxxxxxxxx "+c$+"[r] "
100 a$(4)=c$+"[r] [e] YYYYYYYYYY "+c$+"[r] "
110 a$(5)=c$+"[r] [e] yyyyyyyyyy "+c$+"[r] "
120 a$(6)=c$+"[r] [e] ZZZZZZZZZZ "+c$+"[r] "
```

The variable C$ is there for the programmer's convenience. He can change all instances of the color by changing one variable (which is cool). But it's inconvenient for the user because it slows down assigning strings to the arrays considerably (which is very uncool). Once the the color is decided on, the arrays should be rewritten:

```
80 a$(2)="[g] [r] [e] XXXXXXXXXX [g] "
```

Notice that the second [r] is left off the array. Since reverse is never turned off, there's no reason to turn it on again. It just makes each string array element one byte longer than it has to be, taking up precious memory and further slowing down execution.

>>>>>

Examples of not knowing Commodore Basic often appeared in the magazines of the 80's:

```
240 fora=0toe:printtab(12)a$(a):forl=1to10:nextl:nexta
```

TAB and SPC are pretty much interchangeable, but SPC executes more quickly. Also, NEXTL:NEXTA just adds two more variables. The correct way is the simple way: NEXT:NEXT.
        Nitpicking? Who, me? Heck yeah! To learn to program, don't just pick routines out of other programs. Study them, understand what they do, and rewrite them to work better.
        In many programs, a frequent way to GET a keypress to redirect program flow is this:

```
100 geta$:ifa$<>"y"ora$<>"n"then100
110 ifa$="y"then200
120 (program continues on "n")
```

This is fine for Yes/No options. But many menu items ends up looking like this:

```
100 geta$:ifa$=""then100
110 ifa$="a"then200
120 ifa$="b"then250
130 ifa$="c"then300
140 ifa$="d"then350
150 ifa$="e"then400
160 ifa$="f"then450
170 ifa$="g"then500
180 ifa$="h"then550
190 ifa$="i"then600
200 ifa$="j"then650
210 goto100
```

Lots of typing and lots of wasted cycles. Better to use a GETKEY routine like this:

```
100 ch$="abcdefghij":gosub60
110 onigoto200,250,300,350,400,450,500,550,600,650
```

```
50 rem --- subroutine
60 poke198,0:rem poke208,0 for C-128
70 geta$:fori=1tolen(ch$):ifmid$(ch$,i,1)=a$thenreturn
80 next:goto70
```

This routine was swiped from COMPUTE'S Second Book of Commodore 64 and modified into a subroutine. To check for a different group of keys, just change the contents of variable CH$ and GOSUB to the subroutine.
        What follows is a fast way to view a directory from within a program. It works for all drives, even CMD devices. DV is the drive you need a directory from, D$ is what you want to search for. (I think I swiped this from an old RUN magazine Magic Trick.) It can be further crunched from this expanded text version.

```
10 dv=8:d$="$0:*":rem: d$ can be changed to look for prg/seq/rel/cbm
20 print"[SHIFT CLR]Shift Key Pauses   Commodore Key Aborts"
30 x=12:y=13:z$=chr$(0):open1,dv,0,d$:get#1,a$
40 get#1,a$,a$,a$,a$,b$,c$:printasc(b$+z$)*256+asc(a$+z$)c$;
50 fori=1tox:get#1,a$,b$:printa$b$;:next:print
60 ifb$<>""thenx=y:wait654,1,1
70 ifpeek(653)=2then90
80 ifb$<>""thenpoke198,0:goto40
90 close1:end
```

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A DISCUSSION ABOUT PRINTERS
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Ed Harler wrote:

It looks as though my Panasonic dot matrix is developing the same problem it had when I first purchased it -- sticking pins. Since repairing it will cost more than I paid for it new, and since there are very few new dot matrix around, I suppose it's time to think about getting an ink jet or bubble jet printer. So...the question is: what is your recommendation?

From: Dick Estel

The answer requires another question: What type of printing do you do? I have an Epson Stylus Color 600 which is excellent with my PC, and prints text in The Write Stuff from the Commodore, using the same printer codes that I have used for years. One exception is double size printing, which I suspect is a graphic command not understood by the Epson. But bold, italic and various font sizes work fine.

This leads to the main concern: If you do a lot of graphics printing, it gets tricky. I could never get the Epson to print anything usable from GEOS or Print Shop. However, I suspect it can be done by those who know what they are doing.

Another concern is that newer printers have no dip switches ("just use your windows printer software to make any desired changes" --not too helpful for Commodore users).

Ron Hackley wrote an excellent article several years ago about his search for the right ink jet. I don't know if I have it anywhere in electronic form, but perhaps Ron does and would Email the text to you.

What follows is from an article by Maurice Randall that addresses printer command codes which may or may not be helpful at some point in or following your quest.

Unlike the BJC-4100, the BJC-4000 does have dip switches and you can use it with your Commodore easier than you can the 4100. The dip switches are accessible from inside a cover on top of the printer.

There are 13 switches numbered from 1 through 13. The main one is number 11. In the OFF position the printer is in BJ mode and in the ON position it is in Epson mode.

11 OFF (BJ Mode)

1	OFF=letter width		2	OFF=normal
	ON=a4 width			ON=text scale mode
3	OFF=11" length		4	OFF=character set 1
	ON=12" length			ON=character set 2
5	6	7	8	OFF=no linefeeds
Set character				ON=linefeeds
code page:			9	OFF=normal
OFF	OFF	OFF		ON=agm mode
OFF	OFF	ON 850	10	OFF=64k buffer
OFF	ON	OFF 850		ON=31k plus
OFF	ON	ON 863		41k download buffer
ON	OFF	OFF 865	12	OFF=normal
ON	OFF	ON 850		ON=auto emulation
ON	ON	OFF 850		switching mode
ON	ON	ON 850	13	OFF=normal
				ON=smoothing

11 ON (Epson Mode)

3 not used			4	OFF=italics set		
				ON=graphics set		
5	6	7	8	9	10	
international			sets the			
character set:			typeface			
OFF	OFF	OFF USA	OFF	OFF	OFF	Roman
OFF	OFF	ON UK	OFF	OFF	ON	Sans Serif
OFF	ON	OFF German	OFF	ON	OFF	Draft
OFF	ON	ON French	OFF	ON	ON	Courier
ON	OFF	OFF Denmark	ON	OFF	OFF	Prestige
ON	OFF	ON Sweden	ON	OFF	ON	Script
ON	ON	OFF Italy	ON	ON	OFF	Orator
ON	ON	ON Spain	ON	ON	ON	Orator-S

Changing the positions of the switches only takes effect the next time you turn the printer ON. So, if you make a change, nothing will happen until you turn the printer OFF and then back ON.

If you plan to use just text mode such as with Write Stuff, then Epson mode is recommended with switch 11 ON. Leave all other switches OFF unless you want to change the typeface with 8, 9, and 10.

For programs that print graphics, try BJ mode with AGM turned ON. That would be all switches OFF except 9.   >>>>>

This would help to simulate a 9-pin printer. If you have a printer driver that works with a 24 pin Epson, then use the Epson mode with all switches OFF except 11. In any mode you might want to experiment with switch 13 to turn the smoothing function ON. For some graphics that improves the appearance if the original is a low resolution image. For programs that can print in high resolution such as geoFAX, leave this turned OFF for best results.

Also for geoFAX, use the BJ mode with the Canon driver to get the best prints. It is far superior to the Epson driver.

From: David Mohr

I read an article a while ago by, I think, Dale Sidebottom in an issue of Load Star which covered a program that installs in the memory of the printer so the new dipswitchless printers will operate on a Commodore. Personally I got a Canon BJC 4000 colour job <free> that I do all my GEOS work with, using some drivers from CMD's site that Doug Cotton told me to grab.

From: Paul Berry

Several years ago I decided to get an inkjet, and I read that Epson compatibility was very important so I decided why not just get an Epson in the first place. I did, and it has worked very nicely for me ever since. Most printer drivers for the Commodore are Epson compatible. Incidently I got a color printer and I really like the color printouts.

From: Howard Herman

If you will want to include text printing (as opposed to graphic's, for example, GEOS), then be sure to get an Epson that offers its own internal fonts. The majority of models do not have fonts since most are aimed at the Windows market and graphic only printing.

Why Epson and the other manufacturers omit the fonts I will never know. It cannot cost more than 10 or 15 cents for the rom chip.

A model I use with Windows, the "Epson Stylus Color 800," has its own internal fonts, but was discontinued about one year ago.

From: Joseph Fenn

Wish I could help Ed, but I just bought a new Lexmark 3200 on sale here hoping I could use it either on my c128 and/or my PC laptops, but alas not so!!! I use the super graphix Gold interface on the c128 so just assumed could swap to an inkjet and set the dip switches for Epson emulation but no joy! Even on the PC's it only works within Windows. If I drop out to DOS and try to print a screen or any applications from DOS it's no joy either. The book says I have to use the HP500C drivers in order to print from DOS and even then, if the application in use doesn't offer a choice of printers that includes "HP500," it's still no joy. I can however print from DOS if I actually do it inside Windows95 and just call the application into a Windows screen.

From: John Elko

Suggest you contact DALE SIDEBOTTOM about using Lexmark printers with 8 bit computers. He uses one to print the Lucky Newsletter in beautiful color powered by his C128 system.

From: Rolf Miller

Regarding sticking printhead pins, since no one suggested cleaning the printhead, here's how. Remove the printhead, place it face (pin side) down in a container of alcohol (just enough alcohol to cover the pins) and soak for a couple of hours. Remove and brush with a camel hair brush.

From: Rob Snyder

I have done this and it really does work! It made me nervous to plug the printer back into the outlet the first time I did it, but I'm one who would rather use a hand saw than a chainsaw to saw a large branch.

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Bugs and Anomalies in TWS 128
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by Dick Estel

As I used The Write Stuff 128 over the years, I discovered some annoying behaviors. I hesitate to call them all bugs since the program's author discussed one of them as part of normal operation. So I will call it an anomaly.

This anomaly is related to the macro feature. You call up the macro file in order to make a temporary macro, by typing (CONTROL SHIFT M). At this point, the entire macro file is merged above your current document. This does not make sense to me since you must delete it before you save your document. When you delete it, the macro file gets trashed. After this, you can no longer use the macro feature. Every time you type a one or two-letter word, the cursor either locks up or disappears entirely. You can eliminate this problem by turning off the macros (CONTROL m). But you are without macros until you re-boot.

Another problem, which may be related to the above, occurs in relation to the multiple text area feature. Sometimes when I create a document, then switch to the alternate text area via CONTROL SHIFT Q, the same document appears in the other area. Additionally, any text clear action (CONTROL SHIFT CLR) performed on one area acts on the other area and erases BOTH documents.

Several times I have had a problem with sections of text not printing when using columns. I was only able to correct this by adding returns above the line that disappeared. When I edited the January 1999 MaiLink, I encountered the same thing with portions of text lost at the top of each page. I ended up printing each page separately since adding returns in the middle of a paragraph threw the formatting off. For the January 2000 MaiLink, I used linked files so I could print the entire publication at once. For one section, I had to place a return at the top of the page to make the first line print. This created an extra line which then affected the formatting for the rest of the issue.

Finally, there is a definite bug relating to use of the print to memory feature. After using this feature several times, the program crashes in various interesting ways. This usually happens after a SAVE, but sometimes after a LOAD or even while cursoring through the file.

Crashes take one of the following forms:
1. The cursor disappears and no screen movement is possible.
2. The screen fills with what appears to be at least partly program code, but mostly garbage. I can go to top and bottom using CLR and HOME, but there is no other cursor movement.
3. While paging through a document with F7 the document scrolled up out of sight and was gone.
4. A series of numbers appears and the computer dumps out of the program to the monitor. Garbage or part of the text may or may not appear on the screen.

Recovery: Pressing RUN/STOP RESTORE reverts to the basic start-up screen. Typing RUN with RETURN may recover to the garbage screen, but usually does not recover at all. Following a reset, entering the POKE and SYS codes from the manual virtually always recovers but the RETURN character looks different, the REU drive is gone, and preview mode sometimes gives a display in which graphic characters replace upper case and embedded code characters. In other words, it is best to SAVE the recovered file and re-boot the program. Of course, I always make sure I save the document frequently while working on it.

None of these problems are frequent or severe enough to change my opinion that TWS is the world's best Commodore word processor. Like everything, the "best" can always be better.###

(Some other "anomalies" experienced with TWS 128 by the editor include the occasional appearance of the number 3 during insert/delete operations and the inability to print lines filled with certain characters like the equal sign, as appears in the tile line.)
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MANIPULATING TWS   by Rolf L. Miller

As is often seen in pages of the MaiLink, a lot of members think a great deal of The Write Stuff (TWS) word processor. One of the reasons for this praise is its ability to manipulate text in a variety of ways. An important ingredient in this capability is that it's post-formatting. That is, rather than how the page looks on screen, the format of the printed page is determined at the time of printing. While some of this formatting can be done at the print menu, the greatest control is accomplished with the use of formatting codes within the text. For example, if the desire is to center a line of text, it is is given a centering code rather than centering it on screen.

Without debating the advantages and disadvantages of post-formatting, suffice it to say that added to other options TWS allows, things can be done which, at the least, are not easily done otherwise. For instance, a list of names existed on an IBM computer that the user wanted printed grouped in four columns. Because TWS can directly convert true ASCII, receiving the list via e-mail presented no problem. Then, because TWS can print in two columns and allows printing to disk, accomplishing the four column format quickly ensued.

The first step in producing a four column print out is to set the text up for double column printing with the Page Width (pw) set to half a page. The example at left is how it might appear in TWS. The reverse characters are the format codes. To figure the half page pw, subtract the full page lm and rm (Left and Right Margin) from full page pw, divide by 2, then subtract full page cm (Column Margin). To complete the half page set up, set tm, bm, lm, rm (Top, Bottom, Left, Right Margins) to zero, pl (Page Length) to half the number of text lines, and cm (Column Margin) as needed to separate columns.

```
▊▊▟▞▞▞▛▩⊙▜▩⊙▜▩⊙▜▩⊙▜←
▊▟▊▛←
▛▜▩▛←
AA Last Name←
BB Last Name←
CC Last Name←
←
▊▟▊▛▛←
DD Last Name←
EE Last Name←
FF Last Name←
GG Last Name←
```

```
AA Last Name      CC Last Name←
BB Last Name      ←
DD Last Name      FF Last Name←
EE Last Name      GG Last Name←
```

Preview this set up. When it's right, print to disk. Then load the resulting sequential file. The product is a half page in double columns as seen at left.

```
▊▟▊▞░▛▞░▞▞▞▛▛▜▛▜▛▜▛▜←
▛▜▟▛←
▛▜▊GROUP 1▊▛▛←
←
AA Last Name      CC Last Name←
BB Last Name      ←
←
▛▜▊GROUP 2▊▛▛←
←
DD Last Name      FF Last Name←
EE Last Name      GG Last Name←
←
```

The next step is to set up for the full page print out. Since the text is now formatted in two columns, printing it as double columns produces the wanted four columns.

Of course, the example here seen is abbreviated. To cause just what is shown to print in four columns can be accomplished in two ways. The first adjusts the pl to 10. The other adds a comma 10 to the cm (▛▜▟▛▛▛▩).

GROUP 1

```
AA Last Name      CC Last Name
BB Last Name
```

GROUP 2

```
DD Last Name      FF Last Name
EE Last Name      GG Last Name
```

TWS TIPS by Emil J. Volcheck, Jr.

UPGRADING

The Write Stuff word processor exists in several versions: BB Writer and Talker for the 64, BB Speller (aka version 2) for both the 64 and 128, and the Illustrator offerings. If you customized a version and want to use another version with the same customized features, all you have to do is replace the BB WRITER and BB MACROS files in the version you want with the same files from the customized version. These two files contain your printer settings, color preferences, macros, etc.

PRINTER TOGGLES

```
b = Boldface                When setting
[b]=27,72:27,73         up your working
d = Double width        copy of TWS 64 or
[d]=14:129              128, one chore is
e = Emphasized          to get the "printer
[e]=27,84:27,73         toggles" right for
g = User-defined        the printer you are
[g]=?                   going to use. (The
h = User-defined        printer toggles are
[h]=?                   CTRL 1 format codes
i = Italics             and are displayed
[i]=27,52:27,53         on one of the help
k = User-defined        screens.)  Earl
[k]=?                   Walter some time
o = User-defined        ago provided us
[o]=?                   with a trick to
p = User-defined        ease the task.  He
[p]=?                   created a file as
q = LQ/draft            shown (the letters
[q]=27,49:27,48         surrounded by [ ]
R = Reverse field       represent single
[R]=18:146              reverse video
s = Subscripts          characters).
[s]=27,76:27,77            The procedure
S = SUPERscripts        is to type up a
[S]=27,74:27,75         TWS file with the
t = User-defined        correct printer
[t]=?                   codes for each of
u = Underlining         the defined toggles
[u]=27,67:27,68         (assuming your
. = Condensed           printer supports
[.]=29:15               them).  You can
                        also define the
```
user definable ones -- and this file acts as a reference to what you defined! Save the file, then PRINT it. This sets ALL the printer toggles just as you want them! Then press CTRL, X, then cursor over to SAVE DEFAULTS and press RETURN. This copy

of TWS is now customized for that printer.
Should you have more than one printer, make a file for each. If you want to change your customizing, just print the file, but do NOT save defaults. The change will only last till you quit TWS or run another customizing file.

DISK DRIVE CAPABILITIES

TWS allows the use of device numbers from 8-29. This accommodates devices like CMD hard drives or RAMlink which default at device number 12 and 16 respectively without having to switch device numbers. And TWS has the ability to send commands directly to a drive, which is absolute essential for 1581 or CMD device use to switch partitions, etc. Just press CTRL, then the up-arrow (above the RETURN key), then type the command, and press RETURN.
Version 2 of TWS can immediately access up to five different drives, a-e, representing device numbers as set via the customizing option. It's actually possible to have access to six drives at the same time by setting the default device containing the program and dictionary files to a device different from the a-e devices, though this 6th device can not be changed while using TWS.

HTML EDITING

If you happen to have a need or want to edit a web page in Hyper Text Markup Language (HTML), TWS is as good a text editor as any to do the job. (HTML is nothing more than text tags which cause the text to display as the tags instruct.) An HTML document created in TWS need only be converted to true ASCII, saved as an html file (e.g. name.htm), and uploaded to its destination web page.
And TWS has this real nice macro capability that can ease the tag-typing chore. Just start a new TWS file and type in the macro tags. Save the file for future use. Then when you want to use them, load the file, eat it, open the TWS macro file (with CTRL, then SH-M). Paste the tags at the beginning of the macro list, with your cursor on the first letter right where the first regular macro starts. Then enter CTRL, then SH-M again and your new HTML macros are ready to use.

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THE 64 AND THE POET

Poems are words, sometimes rhymed, arranged in an imaginative, rhythmical way to express experiences, inspire thought, and kindle the emotions. A rhyme, on the other hand, is verse, sometimes poems, in which there is a regular recurrence of corresponding sounds, especially at the end of lines. In other words, a rhyme by itself does not a poem make.

Nonetheless, whether the results constitute a poem or not, creating rhymes can enliven any verbal expression of one's thoughts. And the act of searching for words that rhyme can stimulate the imagination. And it is the imagination that spawns poetry.

Words that rhyme contain corresponding terminal sounds such as in the words "bell" and "sell." So, words which rhyme with "bell" can be found by substituting other consonants for the letter "B." While this can be accomplished by hand, some dictionaries contain tables of rhymes that list words by their ending sound. This has the advantage of finding words whose terminal sounds rhyme even though the spelling differs like "her," "fur," and "stir."

On the other hand, the computer is sitting there, just begging for something to do. And manipulating text is a task computers handle with ease. The only requirement is a little programing.

The program following is designed to accomplish this very thing. (It is on the disk version of this issue.) It takes the word entered, strips its beginning consonant(s) if any, then presents a list of words formed by adding each letter of the alphabet and combination consonants. Of course, not all words in the list are real words and spelling is not a function of the program. So, entering the word "blue" will yield words like "brue" and "stue." It's up to the user to recognize these as real words when correctly spelled "brew" and "stew."

To use the program, first write down key words of the thought to express. Run the program, type in a key word and press RETURN. The word list will display. If the list scrolls off screen, press RETURN again and use the space bar to pause, CTRL key to resume display. Look over the list. Regardless of the spellings, sound out words according to the sound of the word entered. Jot down any words that strike a mental chord with the desired thought. Note variant spellings. Repeat for all key words. Then run the variant spellings. For compound and complex words, enter the end word or syllable.

Use the words thus derived to compose the verse. If other words come to mind that fit the thought, run them through the program.

```
10 read v:dim v$(v)
20 for x=1 to v:read v$(x):next
30 read c,cl:ct=c+cl:dim c$(ct)
40 for x=1 to ct:read c$(x):next
105 print:input"enter word";w$
110 l=len(w$):r$=right$(w$,l-1):print
120 for x=1 to v
130 if left$(w$,1)=v$(x)then r$=w$
140 next:for x=1 to c:lw$=left$(w$,2)
150 if lw$=c$(x)then r$=right$(w$,l-2)
160 next:for x=c+1 to ct:lw$=left$(w$,3)
170 if lw$=c$(x)then r$=right$(w$,l-3)
180 next:for x=65 to 90
190 get q$:if q$<>""then wait 653,4
200 print chr$(x)r$,:next
210 for x=1 to ct
220 get q$:if q$<>""then wait 653,4
230 print c$(x)r$,:next:print:goto 105
1000 data 5,a,e,i,o,u:rem 5
1010 data 33,9,bl,br,ch,cl,cr,dr,fl,fr
1020 data gh,gl,gr,kn,ph,pl,pn,pr,ps,qu
1030 data rh,sc,sh,sk,sl,sm,sn,sp,st,sw
1040 data th,tr,tw,wh,wr:rem 33
1050 data chr,sch,scr,shr,spl,spr,squ
1060 data str,thr:rem 9
```

*****   *****   *****

Pease porridge hot,
Pease porridge cold,
Pease porridge in the pot,
Nine days mold.

Some like it hot,
Some like it cold,
Some like it in the pot,
And never grow old.

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CD-ROM COMMANDER 128
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a review from Sensei David O.E. Mohr

In the morning mail of Friday, Jan, 28, 2000, I found from Dale Sidebottom my copy of the CD-Commander. I originally heard about this in an article I read a while back. I can't remember if it was on the Spitfire C/Net echo or in and old dieHard or exactly where, but I remember the article spelled it CD-Kommander.

As a member of the Omni World Echo Net, I'm tied to Omni World Germany, run by Big Chief <Michael Nausch>. He spoke of running a 128D with a load of CMD stuff along with this thing called a CD-Commander. I sent a net message to him asking what it was all about. He connected me to Michael Sholich <ID #10 at Omni World Germany>, who is also a member of the U.S. group, Lucky, which brings me back to Dale Sidebottom. Long story short: I placed my order for the CD-Commander with Dale <luckykds@igloo.com> as he has the U.S. rights from Achim Taege in Germany, and Dale shipped the disk.

This disk is in English. Along with it came a fact sheet printed in colour and photos, all done on a C=128 with Wheels and Post Script. What a beauty! If anyone has seen the "Star" issue of the Lucky Report, they know what I mean. (It blew away some of the IBuMmers that come to my shop.) With Dales fact sheet is a translation of the documentation from Achim.

Well, I'm a neophyte at understanding all the Computer jargon. I don't know how or what on most things. But it took this butter-fingered illiterate just 10 minutes to set up the system! That time included shutting down my BBS and copying the disk to a hard drive partition. I then loaded and ran the program and followed the step by step explanations for everything. I may not know what it means, but I got the bugger working. In other words, if this klutz can do it, anyone can do it, given a C=128, a CMD Hard Drive, and, of course, a CD-Rom drive.

(From Bruce Thomas: What you need is a CMD HD and an External SCSI CD-ROM Drive. The HD provides the SCSI Controller Interface to access the CD-ROM Drive. The CD-ROM Commander software provides the software to read the CD's.)

(Q: If I wanted to write on rewriteable CD's, will the CD-Commander do the job?
From: Bruce Thomas: No. CD-ROM Commander is only for reading CD's. As far as I know there is no software for the Commodore to Write to CD's yet.)

You CAN'T load and run a program from the CD. But what you CAN do with it is copy files. It is set up for TXT, RAW, WAV, .D64 and a few more that I have not the slightest inkling as to what they are in relation to Commodore.

But I do know the .D64 files. I can convert them back to normal on a standard 1541 formatted disk (or partition) from which programs can be loaded and run. Right now I'm copying from a CD called "Retro Gold" (Software Hut: www.softhut.com or 1-800-93-AMIGA) containing more than 750 .D64 files which I borrowed from my son, our group's Amiga chairman. CD-Commander will not only copy to the 1541, but also converts it back to the normal Commodore format -- easier than what I was trying to do with the Load Star converter on IIRC #174.

Other CD's of D64 files, made for those with PC's running Commodore 64 emulators, are available. Roger Lawhorn is putting together the Lucky clubs library which is expected to contain about 120MB of Commodore files. Following that are plans for a CD of containing the over 10,000 Commodore files from GEnie. Bob Stone of the Albany-Corvallis Commodore Users Group here in Oregon made a CD containing about 120MB of both Commodore and Amiga files (costs $25 from ACCUG POB 408 Tangent OR 97389). Other sources to consider are http://members.aol.com/geogermany (Jubilaeums-CD 50 loads of GEOS PD files), brotkasten@8bit.com or http://www.8bit.com (Brotkasten CD and Brotkasten Gold. gfx, sounds, games, tools and demos Lutz Hilmann), drsepe@sci.fi (C64 Plus2-CD C=64 & Vic 20 collection).

Contact Dale Sidebottom for even more information than I can give here.
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PEER PRESSURE & TURNING WORMS

Think back to the early 1990's. Did friends and/or acquaintances question why you continued to use an outdated computer -- their target, naturally, being your Commodore? Did they measure their comparison against the newest offerings of the day which, of course, they had just purchased?

Now think to the mid 1990's. Did their remarks turn sarcastic? Did the term "dinosaur" often color their words? Coincidently, were many of these folks in the throws of upgrading their systems?

Now think back just a couple of years. Did the talk become near ridicule? Did anyone ever say to you, "Why don't you get a REAL computer?" Perhaps this chatter came while these folks were showing off their newest acquisitions?

Have things changed since then? Maybe questions are still asked, but their nature is different? Instead of distain, have you by chance been asked things like: "How did you do that?"

Or are there some who now just don't say anything? What about those folks who are silent? Are they in the process of getting their third, some even their fourth, generation machines? Or perhaps they suffered Y2K problems and were forced to make new purchases? If not Y2K problems, have any made comments about experiencing trouble running the newest software. Or maybe the latest offerings wouldn't run at all?

Now turn the attention to yourself and ask: why do you continue to use your Commodore? Does the reason have to do with the fact that the Commodore continues to accomplish what you ask of it? It might be word processing chores, spreadsheet tasks, even graphics where illustration rather than photography is the purpose. (And there is no put down intended here of what can be accomplished with GEOS using Post Script printing.)

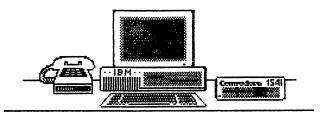In addition to the many very reliable programs capable of handling all of these tasks on the Commodore, there are numerous routines and applications written in BASIC which accomplish a multitude of specialized jobs. And if you happen to be one who knows how to write programs, the Commodore is an efficient machine with which to ply that craft. Routines can be written to provide various unique results and otherwise manipulate data in ways not easily accomplished with other programs.

Couldn't a bigger PC do all these things? Maybe, maybe not. The bigger machines can handle BASIC programming. In fact, with a little work, BASIC programs written on the Commodore can be converted for use on other machines. However, what sense does it make to expend the time and effort to create the conversion in order to accomplish the same results already being handled by the Commodore? Likewise, how much enthusiasm is generated by the suggestion that you could accomplish these same things by utilizing features available within programs provided by the bigger machines? Besides, there is no assurance that the bigger PC's can accomplish the specialized tasks you might be doing with your Commodore. How else can you explain remarks like, "How did you do that?"

Elsewhere in this issue is an article that shows how 4-column printing can be accomplished using The Write Stuff word processor. It came about because the person needing it couldn't figure out how to do it on an IBM-type computer. This isn't to say that the 4-column format couldn't have been accomplished on the bigger PC. The user didn't know how.

Lack of know-how is a common problem among IBM-compatible users. While a lot of the "know" can come from book learning, most of the "how" comes from experience. It is difficult to become fully conversant with a computer system that needs constant updating. Add to that the necessity of getting a new machine every few years.

All of this is not to suggest there isn't a place for a bigger PC. But the familiarity resulting from many years of Commodore use can be called intimate. And that explains why Commodore users who have bigger PC's are seen putting them in their place -- as slaves for Commodore use.

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UTILIZING COMMODORE FILES ON AN IBM
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by Rolf L. Miller

Being the Treasurer for the group provides the opportunity to read letters that members often include with their renewals. Besides expressions of thanks to the officers of the group for the work they perform and comments about how much they enjoy the MaiLink, some provide clues as to interests. Consider, for instance, the following.

"I was looking through the last issue of the Mailink to find your address so I could advise you that I would not be continuing my subscription. I felt that I did not use the Commodore very much anymore since I have another faster machine. Then I noticed your article about making the IBM useful. Perhaps I can retrieve my Commodore data after all and print it out on this, a better printer than the I use on the 64. I liked the TWS word processor a lot more than the one that came with this machine."

The article referred to appeared in the November 1999 MaiLink. It bore the title COMMODORE MAKES IBM USEFUL, and suggested several ways in which the Commodore can be used to enhance utilization of the bigger PC's. The article came about because the e-mail addresses of not a few MaiLink readers indicate use of IBM-type machines, and those who discover the advantages of using the two machines together are not apt to abandon their Commodores. Indeed, as one commented, "If it weren't for my Commodore 64, this PC contraption would be a very unsatisfactory experience."

The desire among those who have the bigger PC's to utilize text files formerly created on the Commodore is not uncommon. In fact, those who do write to say they are dropping out because they have switched platforms often ask that very question.

It is also common for those who formerly used The Write Stuff (TWS) word processor to express a preference for it after switching computers.

Therefore, given the ability to make TWS files available for use on IBM-type computers, it is not unreasonable to suggest that folks continue to use their Commodores to produce text files for utilization on the bigger PC's. Indeed, not a few do.

To accomplish this involves two steps. First, IBM-type computers use true ASCII and text generated by IBM-type computers contains a linefeed following carriage returns. So, to make files created on the Commodore usable on the IBM platform requires converting the text to true ASCII and adding a linefeed following carriage returns. Second, a means is needed to transport the files to the bigger PC.

There are several ways to convert files created on the Commodore to true ASCII, and it is easier done than said. Most of the better word processors allow for it. If the conversion does not allow for adding a linefeed following carriage returns, it can be added by using a search and replace. The ASCII code for the carriage return is 13. The ASCII code for the linefeed is 10. In TWS with true ASCII displayed, the carriage return appears as a lower case m. The linefeed appears as a lower case j. So, search for lower case m and replace with lower case mj.

With TWS, the conversion to true ASCII and adding the needed linefeeds is easily accomplished in one of two ways. The most straight forward method prints the text to disk at the print menu with all margins set to zero, a page width of 70, a page length of 250, linefeed on (which automatically adds the needed linefeeds), and true ASCII on. (To print to disk on the 64, tap the D key at the print menu after setting up the margins, etc. and enter a filename.)

The other technique converts the text to true ASCII by tapping the CTRL key followed by holding the A key down until the conversion is complete. The text will change to mostly graphic characters. Then do a search and replace, searching for
>>>>>

lower case m and replace with lower case mj. The results are then saved to disk as a sequential file (delete the hyphen and place a comma s following the file name like filename,s).

It's noted that in this latter method, there is no provision for limiting the length of lines. In other words, carriage returns and accompanying linefeeds appear only at paragraph breaks. This is preferable in some situations.

(To utilize a text file in TWS which comes from an IBM-type computer, tap the CTRL key followed by tapping the A key. Then load the file. The text will appear as mostly graphic characters. Then do a search and replace, searching for lower case mj and replace with just the lower case m to remove the linefeeds. Follow by tapping the CTRL key and holding the A key down until the conversion is complete.)

There are three basic methods by which data can be exchanged between computers: telecommunications, disk media, and direct disk drive transfer. Each of these work equally well, but the direct disk drive transfer may be found the most efficient for every day use.

1) If both computer systems have access to e-mail, it is a simple matter to e-mail text from one system to be received by the other. Similarly, data from one computer can be uploaded to a BBS or other on-line facility, then downloaded by the other computer. Or, if the two computers are in the same place, a telecommunication connection can be established via a pseudo-telephone line between the modems. Or, modems can be eliminated by substituting a null-modem cable for the pseudo-telephone line, though the Commodore will need an RS-232 interface.

2) The second method does not involve telecommunications. Nor do the computers need to be near by. But it does require a Commodore 1571, 1581 or CMD FD series disk drive along with the appropriate programs. These drives have the capacity to read and write MS-DOS data disks. The commercial program to do this is Big Blue Reader. There are also public domain programs to accomplish the same for both the 64 and 128. Thus, the Commodore user can create

a disk which an IBM is able to read and likewise read data from an MS-DOS disk. Of course, the disk size and type must match. But even though most newer PC's don't come with 5.25" drives, they can be added to accommodate 1571 drive use.

3) The third method, besides not involving telecommunications nor the need for computers to be near by, also eliminates any concern about disk size and type. Instead, it connects a 1541 drive directly to the IBM machine. Now, hooking up a 1541 to an IBM might sound strange, but it makes transferring data between the two platforms as easy as using the 1541 on the Commodore. This IBM-1541 combination is possible because, unlike IBM drives, Commodore drives contain their own CPU and operating system. So, any computer can be programmed to utilize the 1541. For IBM-type computers, Star Commander is one of several programs which access the 1541, and it contains instructions for making the easily constructed X1541 cable necessary for connection.

It is understood that these techniques will, for the most part, be of interest only to those who possess or plan to get IBM-type machines. That, naturally, equates to a minority of Meeting 64/128 Users Through The Mail members. But among them are those who presently use or have used at least one of these methods to exchange data between different computer platforms. And as intimated at the beginning of this article, most who have the bigger PC's can usually be contacted via e-mail. Chances are, therefore, that the specifics of these techniques can be learned by making an e-mail inquiry.

To make such an inquiry does not require knowing the specific person who has the desired information. An advantage of e-mail is that one message can be sent all at once to a list of addresses. So, just as a query in the MaiLink usually finds the answer from someone in the membership, so can a query e-mailed to all the members who have an e-mail address. Such a list can be had upon request from Joe Fenn. Page 4 of the November 1999 MaiLink also tells how to subscribe to The Internet For Commodore Users (TIFCU) mail list.

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A DISCUSSION ABOUT FIXING A HARD DRIVE
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Jean P Nance wrote:
      I have a CMD 40 meg hard drive.
Lately it takes spells when the top
activity light starts blinking and the
drive can't be accessed. Previously, doing
the little "Configuration" bit with the
write protect and reset buttons would get
it working. But today when I turn it on it
goes through its "test" phase, then the top
activity light starts blinking and no way
to stop it. Does anybody have any ideas?

From: Georgios Assos
      I think the hard drive cannot unpark
its head. If this is the problem, here
is the solution. In the hard drive manual
locate the commands that park and unpark
the head. Write a small basic program with
an endless loop that parks and unparks the
head constantly. Then repeatedly press
reset on the drive until the head unsticks.
Then immediately load and run the small
loop mentioned above. Leave it running
at least an hour. This will cure it.

From: Jean P Nance
      Thanks for the advice George. I seem
to have solved the problem, at least
temporarily, with a procedure suggested by
Howard Herman. He suggested putting it
upside down on a rug and spinning it as
fast as you can. I tried that but it
didn't work. Then I put the drive upside
down on a large plastic turntable used for
storing canned goods on a shelf and took it
for a nice fast, smooth ride. IT WORKED!
I have now put everything on disk from the
hard drive that I might miss.
      I phoned CMD. The person didn't
believe the fix was because I spun the
drive. I also learned they won't fix 40
meg drives. They instead insert a larger
unit for between $175 & $250.

From: Howard Herman
      I was told the spinning trick a
long time ago by someone who worked for a
company that specialized in retrieval of
data from bad hard drives. The spinning
was always the first procedure he did. He
claimed it got the drive working again in
80% of the cases long enough to easily
recover the data.
            *****   *****   *****

====================
PRODUCTION PROBLEMS
====================

      It seems that Murphy's Laws were
in effect during the production of this
issue of the MaiLink -- at least the one
which says that if anything can go wrong,
it will. First, the 1541 drive began
acting up, failing to load and save files
properly. Next, the printer slipped a cog.
Then the the print head on the replacement
printer started sticking, followed by a
print wheel malfunction resulting in text
which looked like some sort of alien code.

      Fortunately, the disk drive hiccups
proved to be an easy fix. Removing the
cover and inner metal shield discovered a
dirty read/write head. Scrubbing it until
it glittered with a cotton swab dipped in
91% isopropyl alcohol cured the malady.

      The printer problems proved more
difficult to solve. The initial symptom
saw the print head refusing to perform a
carriage return all the way to its left
position. That appeared to be an all-day-
on-the-workbench project. So, up came a
spare printer previously obtained for this
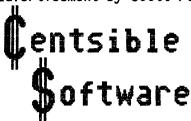very scenario.

      The replacement worked fine -- for a
couple of pages. Then it began refusing
to print the first few characters of a
new page, followed by the aforementioned
hieroglyphics. Past experience knew the
culprit: a rubber cushioning stop.

      This rubber item over time turns to
a sticky goo. The print head hammer gets
stuck in this goo. When it does release,
it is late, striking the wheel as it turns
to position for the next character. That
is like poking a stick into the wheel's
spokes, knocking it out of sync.

      The Citizen Premier 35 daisywheel is
a big, bulky printer measuring 24 inches
long, 15 inches wide, and 6 inches high.
In other words, you can get your hands into
it. So, out came the bailing wire, so to
speak. Actually, the material for this
repair consisted of old rubber inner tube
remnants. Fashioning a stop to replace the
goo and lubricating the hammer movement
brought the desired results.
            *****   *****   *****

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one at C64WARE@CS.COM.

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    Price is to cover posting and
packaging. Contact Dick Estel.

WANTED

    I am looking for an inexpensive CMD
HD; one that I can try to convert to a ZIP
Drive. An old non working 20 megger is
fine. In fact, all I need is the power
supply, the case and the internal SCSI
controller. The rest I have to solder
and assemble.
    Contact Sensei David Mohr, A.C.U.G.,
623 29th St., Astoria OR 97103, or E-mail
me at ronin@pacifier.com

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            The most popular greeting card
program, and its creations, including
kaleidoscope designs, can be captured for
use with The Fun Graphics Machine. Comes
in original box with manual. $9

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            25 used disks, each in its
jacket and visually appear suitable for
reformatting. $5

USED MOTHERBOARDS
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64 original style $14, 64 newer (flat)
style $18, 128 $34.

USED KEYBOARDS
                Excellent! 64 beige $8,
64 white $12, 128 $18. Upper case add $2.

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