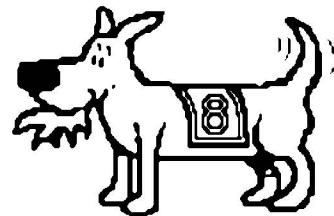


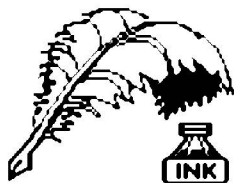
The Zero Page

The newsletter of the Commodore Users of Wichita
For the sharing, learning, and love of Commodore computers"



Eight-bit keeps takin' a byte
out of Commodore computing

Number 34, August 1996



Don's Digest

by Don McManamey

Back in April, Dale wrote about a problem facing some computer owners in the year 2000. With the end of the decade, century and millennium close at

hand, I thought it might be good to point out a few things concerning the year 2000 that some of you don't know. First of all, most people know that leap year comes around every four years. It also happens to coincide with our presidential election years. This is purely coincidence.

The most recent change to the basic structure of the calendar was not accepted by people in this country until some time in the 1800's (I forget the exact year). This makes it after we set up our system for elections. Interestingly enough, every 100 years we actually get ahead by one day. This means that once every 100 years we need to leave out leap year. This happened in the year 1900. But even this is not good enough. Now, every 400 we lose a day again so we have to add leap year back in. The formula is as follows: In years which are evenly divisible by 4, one day is added to February. 1994 is not evenly divisible by 4 so it is not a leap year. 1996 is evenly divisible by 4 so it is. In years that end in 00, such as 1900, if it is evenly divisible by 400 then it is a leap year. If it is not, then no leap year. 1900 was not evenly divisible by 400 so no leap year that year but the year 2000 is evenly divisible by 4 so it will be a leap year. Wow! That's a mouth full.

Most people think that the year 2000 will be the start of a new millennium. Fact is, it is the end. Ever notice that we call this the 20th century but the calendar reads in the 1900's? That is because of how we count. Let me try to explain this way. On the day Christ was born, how old was he? One year? No, of course not. But that was his first year on earth. Therefore, the year one was before his first birthday. Dates are recorded "in the year of our Lord." Continuing on, the first year ended on his first birthday or

at the beginning of the year 2, the first decade ended on his 10th birthday or at the beginning of the year 11, the first century ended on what would be his 100th birthday or at the beginning of the year 101, and the first millennium would end on what would be his 1000th birthday or at the beginning of the year 1001. Remember, we counted a whole year before his first birthday which means he became one when the year became two and so on. Therefore, January 1, 2001 will be the start of the next millennium. I know that this is somewhat confusing but that is just the way it is. You have to complete the 2000th year before you can start the next 1000 years.

**Next CUW Meeting:
Saturday, August 10
1:00 - 5:00 pm
1411 South Oliver**

If you love to cook, join us as
Marie Both demonstrates how
your Commodore computer
can be used to file recipes!

Much of the information concerning the calendar is from my memory of what was written by the Success Calendar Company and was contained in a desk calendar back in the late 1970's or early 80's. Confirmation for some of my assertions is given by the *World Book Encyclopedia*.

August Meeting Agenda

1:00 - 2:00	Equipment setup, informal meeting
2:00 - 2:45	Business meeting
2:45 - 3:00	Break
3:00 - 4:00	Feature demo
4:00 - 5:00	Meeting over, informal gathering, equipment teardown

Your CUW Steering Committee members are:

Dale Lutes	Chair, Newsletter Editor
Jerry Shook	Vice-Chair
Marie Both	Financial Officer
Robert Bales	BBS Representative
Francis Catudal	Public Domain Librarian
Arlen Gould	Member at-large
Shaun Halstead	Internet Representative
Dwayne Howard	Member at-large
Don McManamey	Disk Editor
Morris Shouse	Member at-large



Random Access

by Dale Lutes

*"We go bowling at the bowling lanes,
drink a few beers, bowl a few games.
We're just ordinary average guys."*

Those lyrics by rock star and Wichita native, Joe Walsh, contain the essence of my column for this month. Bowling is a popular sport for average guys. And in bowling, as in many other sports, averages are very important statistics. In Olympic gymnastics, the scores of six judges are averaged to determine an athlete's final score. And every baseball statistician can tell you all about batting averages and earned run averages.

So, what are averages and what have they got to do with Commodore computing? An average is actually a very simple mathematical computation. To get the average of a set of values, add them together, then divide by the number of values in the set. Let's see how this works with an example. If, during my first week of bowling, I score 147, 162, and 150. My average would be the sum of those scores divided by the number of games I bowled:

$$\frac{147 + 162 + 150}{3} = \frac{459}{3} = 153$$

We can do the calculation quickly in BASIC like this:

```
PRINT (147 + 162 + 150) / 3
```

In our program, the parentheses are needed to ensure that the addition is done before the division. Computing averages like this is OK for just a few scores, but what if you have many? You might try writing a program something like the one that follows:

```
10 REM COMPUTE AVERAGES
20 AC = 0 : CT = 0 : A$ = ""
30 INPUT "VALUE"; A$
40 IF A$ = "" THEN GOTO 90
50 AC = AC + VAL (A$)
60 CT = CT + 1
70 A$ = "" : GOTO 30
90 PRINT "AVERAGE ="; AC / CT
```

Here is how the program works:

- line 30: The user is prompted for each score.
- line 40: The program knows that all have been entered when the user presses only the RETURN key.
- line 50: A running total of the scores is updated with each new value. In a program like this, the variable AC which holds the total is often referred to as an "accumulator."
- line 60: The program also needs to count the number of values entered. It does this with the variable CT. Note that we are careful to initialize both AC and CT to zero before we start reading values (back in line 20).

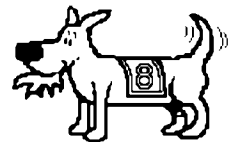
- line 30: One final variable, A\$, receives the input string.
- line 50: This string must be converted to its numeric equivalent with the VAL function before we can add it to the accumulated total.

I hope this article gave you a little insight into how easily our machines can be made to solve simple problems such as averages. So, the next time you sit down at your Commodore, remember to think of it as an "above-average" computer.

The Zero Page is a monthly publication of the Commodore Users of Wichita. The opinions expressed here are those of the authors and do not necessarily reflect the views of the CUW. Unless otherwise stated, articles in this newsletter may be reprinted by other Commodore user groups without permission provided that the author and the CUW are given proper credit.

Meetings of the CUW are scheduled for the second Saturday of each month. The deadline for articles is 14 days prior to the meeting day. Submissions are accepted on 1541, 1571, or 1581 formatted floppy disks. geoWrite, ASCII, or PETASCII files are preferred. In a pinch, paper hard copy will work. Call Dale at 721-0835 or mail your articles to:

Commodore Users of Wichita
c/o Dale Lutes
11102 W. 17th Street
Wichita, KS 67212-1187



In case you are interested, *The Zero Page* is produced using a Commodore 128 and geoPublish. geoPubLaser is used to print the final copy on a PostScript laser printer.

The Buddha, the Godhead, resides quite as comfortable in the circuits of a digital computer or the gears of a cycle transmission as he does at the top of a mountain or in the petals of a flower.

Robert M. Pirsig, "Zen and the Art of Motorcycle Maintenance"
Copyright (c) 1974 by Robert M. Pirsig

Thanks again to all of you who have been remaining behind after each meeting to help clean up and put tables and chairs away.





Rear View Mirror

by Moe Shouse

In the last two Rear View Mirrors,

I talked about my budget being out of balance by about \$30.00. Well I got it balanced now, but I don't need to say anything about how far behind I am in entering data. Also, I have two new toys: an FD-2000 disk drive, and a RAMLink with 4 megabytes of RAM. It sees the RAM as if it were a disk showing 16,064 blocks free! Now remember, a 1541 disk has 664 blocks free. I told my son I haven't even seen that many Commodore disks. The FD-2000 disk drive is a 3-1/2 inch drive. A program I use a lot is 196 blocks of code. In a 1571 drive, it takes 24 seconds to load. In my FD-2000, it takes 12 seconds to load. I think the "F" in FD-2000 must stand for fast. In the RAMLink, the same program takes 2 to 3 seconds to load into the 128 I use. Now *that* is fast! Both are made by Creative Micro Designs in East Longmeadow, Mass. This company does a very good job of designing and building this kind of equipment. They are coming out shortly with a Super CPU for the 128 and one for the C-64. I have sent in my deposit for a Super CPU 128. I can't wait to see how much faster everything is running at 20 MHz, that's right, 20MHz! That is a lot faster than the 2 MHz a 128 runs at now. Like I said, I can't wait!

A few weeks ago, the local PBS station had a 3-hour show called "Triumph Of The Nerds." It is about the people that started the home computer movement. It talked a lot about Apple and IBM. It did not *even* say anything about Commodore computers. However, I did find it very interesting and full of information I did not know. They talked to the people that built and used the first minicomputer. It was a kit made by MITS. Called the ALTAIR 8800, the cost was under \$400. It used an Intel 8080 CPU and ran at 2 MHz. This minicomputer was featured in the January 1975 issue of *Popular Electronics*. It was called a breakthrough and said to rival commercial models. To load software, you flipped switches on the front panel and read the lights on the same panel. No screen, no input/output ports, no keyboard! Just lights and switches. And don't forget it was a kit. *You* had to put it together. In this show, the people that made the ALTAIR said that there were people camping in the parking lot in motor homes waiting for their order.

In the November 1975 *Popular Electronics*, is a column, "Computer Bits." This month, in the last paragraph, it talks about MOS Technology's 6501 CPU. They say it is destined to be a popular CPU because of its low price: \$20.00. This company also made the CPU chips for the VIC-20, C-64, and C-128. And as we know now, there were millions and millions of them made. So when this writer says that it will be popular chip for hobbyists, he thought that home computers would *always* be built at home. Little did he or anyone else, except for Apple's Steve Jobs know that some day, one could buy a *good* home computer.

Tips and Bits

by Dwayne Howard

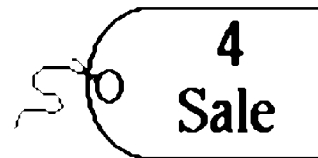
What is a directory?

A directory is a list of what is on your disk.

How do we display it?

Type LOAD"\$",8 and press the RETURN key. The screen will say READY. Now type LIST and press RETURN again. The screen will list all that is on the disk.

This article is just a trial run for the club. If you like it, tell one of the Steering Committee members and I'll give one to Dale each month. The reason I did this is that I myself have a hard time running a program and I thought the new people that joined would get some good out of it. By the way, this will not run over ten lines. This is probably the longest bit I will write.



Mary Wilson has the following equipment for sale. If you are interested, see Mary at the next meeting or give her a phone call at 684-7685.

- 3 C-64 computers
- 1 C-128 computer
- 2 1702 40-column color monitors
- 3 1541 5-1/4 inch disk drives
- 1 1571 5-1/4 inch disk drive
- 1 1581 3-1/2 inch disk drive
- 1 512 Kbyte RAM expansion unit (1750?)
- 2 printers (one is a 9-pin Panasonic)
- 1 piano keyboard for the C-64

Jody Olsen has the following for sale:

Hardware

- C-64 Computer
- 1541 disk drive (may need work)
- Epson Spectrum LX-90 printer
- Printer interface
- Koala Pad with KoalaPainter
- Commodore Splitter
- 2 joysticks
- Printer stand

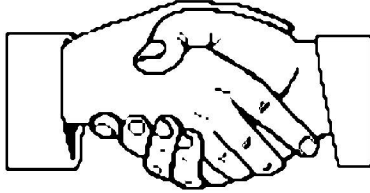
Software

- Cyber Farmer 64
- Write Stuff w/BB Speller
- Bank Street Music Writer
- Household Finance
- Fast Hackem 3.0
- Graphics Printer
- Supercart
- F-15 Strike Eagle
- Land, Sea & Air Advent.
- Chatterbee

Jody has the manuals for most (if not all) of the items. She would like to sell the entire system for \$225. If you are interested, please call 722-4301.

The Helping Hand

This column lists those users willing to share their experiences and knowledge with other club members.



Astrology, Biorhythm

Marie Both

Cards, Posters & Signs

Fred Earley

Ron Shannon

Family Roots

Maxine Ulrich

GEOS

Fred Earley

Dale Lutes

Getting Started

Ron Shannon

Internet Access

Shaun Halstead

Labels

Jerry Shook

Telecommunications

Robert Bales

Printing in Color

Don McManamey

Jerry Shook

Programming

Dale Lutes

Word Processing & Desktop Publishing

Fred Earley

Don McManamey

Jerry Shook

Dale Lutes

Helping Hand Volunteers

Robert Bales

744-2580

Marie Both

262-2338

Fred Earley

722-4044

Shaun Halstead

942-5809

Dale Lutes

721-0835

Don McManamey

265-2560

Ron Shannon

263-6390

Jerry Shook

776-2683

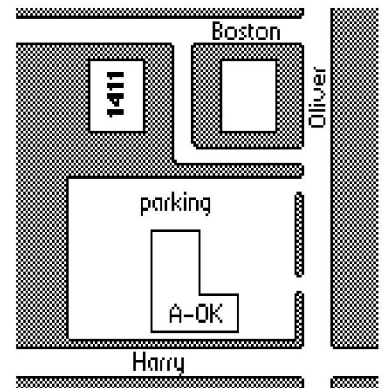
Maxine Ulrich

838-8606

Let us know if we may include your name in future Helping Hand listings. If we don't have a category for you already, we'll add one!

The Commodore Users of Wichita is a club dedicated to "the sharing, learning, and love of Commodore computers." Meetings are held on the second Saturday of each month from 1-5pm at 1411 S. Oliver, one block north of the corner of Harry & Oliver. Anyone who owns or uses a Commodore computer system is welcome to attend.

Family memberships cost \$15 per year. Members receive a monthly newsletter, a quarterly disk publication, access to an extensive library of public-domain software, and the right to vote on matters of club policy. Other membership options are also available. Contact any of the officers (listed elsewhere in this newsletter) for more information. We are looking forward to seeing **you** at our next meeting!



You may join or renew your membership by mail.
Complete this form and mail with a check payable to:

Marie Both
Commodore Users of Wichita
351 E Marion CT, #2
Wichita, KS 67216

Type of membership:

- Family - includes Newsletter & Disk O'Quarter (\$15 per year)
- Newsletter-only (\$5 for 12 issues)
- Disk O'Quarter by mail (\$12 for 4 issues)
- Disk O'Quarter by mail plus Newsletter (\$15)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

List additional family members who are interested in participating:

What Commodore systems do you use? (please check all that apply)

- C-128 C-64 SX-64 VIC-20 C-16 Plus/4
- Other (specify) _____