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# The Memory Map

Canton Alliance Massillon Computer Users Group



Volume 38, Issue 12

December 2018

Dan's Desk

## Computer Fundamentals #1

By Dan Douglas, President, Space Coast PCUG, FL

March 2018 issue, The Space Coast PC Journal

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*Starting with this March issue, I'm going to start a recurring "Computer Fundamentals" series of articles tied into sessions at the Saturday Learning Center meetings. I'll attempt in this series to explain fundamentals of computers, programming and usage that will hopefully deepen your understanding of how it all works and why things are the way they are.*

Computing is all about taking some input, doing something with it and producing some output. How this evolved into today's pervasive technology is amazing.

Herman Hollerith was a US Census worker leading up to the 1880 census. At that time all census data was counted by hand and he recognized a need for a tabulating machine to reduce the time it took to summarize the information. The input was the census forms, a summary of the data is what needed to be done with the input data and the output was the census reports. He invented a tabulating machine that used punch cards that were like those already in use by automated loom machines. The company that he formed, the Tabulating Machine Company, became a great success until the 1910 census when a Census Bureau technician improved on the Hollerith design and removed the monopoly that had been in place. The Tabulating Machine Company later became a company you may have heard of: International Business Machines Corporation (IBM).

If we jump forward a hundred years, what do we have for 1980 state of the art computing? Computers that take up a large room with special power and cooling requirements. Large cables connecting the main processing unit to storage devices that were typically disc drives, tape drives, or some other medium. Input was in the form of punched cards (still!), data stored on storage media or operator terminal screens. Output took the form of storage media as in updated files or printed report output, or as a screen display of information. Computer programs were no longer coded on punched cards, but rather as files (think .exe files) that were executed by

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operator commands or by automation tools. Networking was done by dedicated circuits where security was important from point A to point B. There is a mainframe Operating System (OS) in control of the processing unit. This is the large company environment of 'mainframe' computers still in use throughout the world today.

What came after that was essentially the miniaturization of that mainframe environment into a desktop sized machine. We have a similar OS with either Windows or Mac that runs today's PCs. The PC uses a Central Processing Unit (CPU) typically made by either Intel or AMD that performs the instructions that programs (those .exe files) tell it to process. The input of today takes the form of icons that you click or touch on a display screen, or by automated tasks that run programs periodically. Storage is on your hard disc drive or USB memory stick or SD card. Output can be information displayed on your screen or a report that you print or files that you save on your hard drive.

Here are the core components that every 'computer' type of device have always had:

- a CPU or processing engine of some sort to interpret instructions and to do something - one or more input sources (a button to press, a screen to touch, a sensor, a file to read, etc.)
- one or more programs to take some information or data and do something with it
- one or more outputs (printer, files stored on some media, a screen display, etc.)
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Next, we'll look at programming and how your OS controls everything.

**December 17 – 7:00 PM**  
**CAMUG Christmas Party**  
**With our Giant Raffle**

Nominations and election of officers and board members for 2019.  
The meeting will begin at 7:00 PM. There will be no 6:00 PM program.

**BE SURE TO USE THE NORTH ENTRANCE FOR THIS SPECIAL MEETING.**

Each member family will be given one ticket for attending plus an additional ticket if bringing a food item for the covered dish dinner. Three cash prize envelopes, containing either \$50, \$35, or \$15, will be randomly added to the gift table for selection. No additional tickets are sold for this gift raffle, so each member family will have 2 tickets maximum.



Carol Joliat showing Internet Music – Photos by Bernie Newsome

## **CAMUG November 2018 Meeting Minutes**

### **423<sup>rd</sup> CAMUG Meeting**

**November 19<sup>th</sup>, 2018**

*Shortly after 6:25 PM, a session of “Computer 101” was held called “Internet Music” where Carol Joliat demonstrated Music services available on the Internet.*

*(Tonight’s meeting got a late start due to delayed closing of the childcare program.)*

- *Satellite Radio has been available for some time for a fee. XM/Siris*
- *Pandora is an Internet Music Service available at different price points.*
  - *Free version with advertisements, lower level services such as limited playlists.*
  - *Pandora Plus at \$4.99 /month allows download for offline, unlimited skips.*
  - *Pandora Premium Family at \$12.99 has 6 separate accounts and unlimited services.*
- *Spotify is another Internet Music Service with Music, Podcasts, Video Streaming.*
  - *Free version with advertisements*
  - *Premium version for \$9.99 /month that allows you to create your own stations and download music for offline play.*
- *Google Music is another Internet Music Service with Music, Podcasts, Video Streaming.*
  - *Free version available in the US and Canada with advertisements*
  - *Subscription Family plan available*
    - *Beyond the Music Services gives you ad free YouTube Service*
    - *Allows you to upload you own music files*

### **Regular Meeting ....**



President Dennis Smith called the 423<sup>rd</sup> meeting of CAMUG to order at 7:05 PM on Monday November 19, 2018, at Holy Cross Lutheran Church. There were 11 member families present. Since that is more than 15% of the membership, the meeting was declared valid. There were two renewals. They were Bruce Brugger and Cherie Parker. There were no Visitors.

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The "On Time Drawing" was held. On the first draw #4 for Bruce Brugger was selected. Bruce was present and was wearing his badge and was awarded the On Time Drawing prize.

Dennis requested future meeting topics and reminded the club that new member referrals give you a \$5 credit towards your next year's membership or serving as President gives free membership.

Present Dennis Smith opened the floor for nominations for all the Board positions.

Carol Joliat nominated Dennis Smith for President and Dennis agreed to accept the nomination. Jan Bredon moved to close the nominations for President and Jim Albright seconded the motion.

Carol Joliat nominated Liz Milford for Secretary. Liz was not present, therefore the nomination will need to be discussed with her. Gerry Schaefer moved to close the nominations for Secretary and Bernie Newsome seconded the motion.

Bernie Newsome nominated Tim Elder for Treasurer and Tim agreed to accept the nomination. Jim Albright moved to close the nominations for Treasurer and Bruce Klipec seconded the motion.

Jan Bredon nominated Morris Dingman for the one year Director at Large Position. Morris needs to think before accepting. Jan Bredon moved to close the nominations and Jim Albright seconded the motion.

Dennis reminded the club that additional nominations would be accepted at the December meeting.

December Meeting is the Christmas Party. **BE SURE TO USE THE NORTH ENTRANCE FOR THIS SPECIAL MEETING.** Each Board member was authorized to purchase gifts for the raffle drawings and upon presentation of receipts will be refunded up to \$25 for this purpose. Each member family will be given one ticket for their attendance plus an additional ticket if bringing a food item for the covered dish dinner. Three cash prize envelopes, containing either \$50, \$35, or \$15, will be randomly added to the gift table for selection. No additional tickets are sold for this gift raffle so each member family will have 2 tickets maximum.

**Church's Special Event "Night in Bethlehem"** is Saturday and Sunday December 8<sup>th</sup> and 9<sup>th</sup> starting at 3:00 PM each day. Dennis highly recommended this as a wonderful experience. Doors open at 2:30 PM and the line forms indoors with seating. Every 10 minutes tour groups are taken through Bethlehem. It is all on one level, no stairs. Tours continue 3:00 to 7:00 PM. No fee is requested or accepted. This is the church's gift to the community.

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## Tonight's meeting topic was "Backing Up Your PC"

### Why Backup?

If you play only solitaire... then never mind! If anything more than that you have personal information at risk that you don't want to lose. MTBF is how all hard drives are rated and stands for Mean Time Before Failure. Eventually your hard drive will go bad. Pictures, emails that contain history, Tax Returns, Genealogy records, Programs that you may have downloaded, or possibly Address Books are at risk of disappearing.

### Backup Options:

Mirrored Image - Writing to two drives simultaneously, exact copies of each other.

Full Backup – Periodic copy off to a **separate** drive location.

Full Disk Image – Periodic copy of the complete disk structure and data.

Incremental – Complete primary copy followed by one or more change files from last backup.

Differential – Complete primary copy followed by change file copies each complete to primary.

- Mirrored Image –
  - Can be set up within Windows 10
  - Quick Recovery
  - Always up-to-date
  - Protects against single hard drive failure.
  - No protection against environmental events.
  - Not good virus protection.
- Full Backup
  - Easy Set-up
  - Configurable to folders only
  - Quickly out-of-date
  - Some files will not copy because of directory name length
  - Protection against hard drive failure
  - No protection against environmental events.
  - Some virus protection.
- Cloud Backup (i.e. Carbonite, MosyHome, iDrive)
  - No additional hardware required
  - File deletion might affect backup too
  - Long restore times (Depends on network speed)
  - Forget to pay, your backup goes away
- Full Disk Image
  - Exact copy

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- All software and all data (other methods typically only data)
  - Quickly out-of-date
  - Hard to restore individual files
  - Incremental
    - First time copies all (primary copy)
    - Next copy is partial, only files that changed since original (primary copy)
    - Next copies are partial, only files that changed since last partial copy
    - Quick but complicated restores require backup/restore software to manage
    - Normally only data folders are copied
  - Differential
    - First time copies all (primary copy)
    - Next copy is partial, all files that changed since original (primary copy)
    - Next copies are partial, all files that changed since original (primary copy)
      - Supersedes previous change file
    - Normally only data files are copied
  - What is best for you?
    - Depends on how you use your computer
    - Might be a hybrid/combination of methods
    - Consider some method that addresses Environmental concerns.
    - Depends how important your data is to you

Remember that Acronis True Image Home backup program is available to club members for 50% off.

8:00 PM Break for refreshments and 50/50 ticket sales.

8:15 PM Meeting Resumes

Raffle Drawing.

Ticket #523 pulled for Carol Joliat. Carol selected a Surge Protector from prizes.

Ticket #524 pulled also for Carol. Carol declined and requested another draw.

Ticket #532 pulled for Bernie Newsome who was awarded the cash prize.

Genealogy will be the primary program in January.

Additional discussion towards the end of the meeting...

Save your Tax records as PDF in case you lose your Tax Program.

Free Disk Image program built into Windows 10  
(Settings, search "backup", Click on Win 7 backup)

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Acronis Backup appears to be \$25 for club members, other versions available.

At 8:55 Bernie Newsome motioned to adjourn. Ruth Albright seconded it. The meeting was adjourned.

Respectfully submitted,  
Jan Bredon

## CAMUG Board Meeting Minutes 11/26/2018



### CAMUG Board Meeting Minutes...

President Dennis Smith called the November 26, 2018, Board meeting of CAMUG to order at 7:00 PM at Panera Bread on "The Strip" in North Canton. There were 6 of the 7 Board members present; therefore, the meeting was declared valid.

President	Present	Dennis Smith	<a href="mailto:president@camug.com">president@camug.com</a>
Secretary	Present	Liz Milford	<a href="mailto:secretary@camug.com">secretary@camug.com</a>
Treasurer	Present	Tim Elder	<a href="mailto:treasurer@camug.com">treasurer@camug.com</a>
Senior Director	Present	Carol Joliat	<a href="mailto:directors@camug.com">directors@camug.com</a>
Director		Jan Bredon	
Director	Present	Bernie Newsome	
Director at Large	Present	Morris Dingman	
Web Page		Michael Charney	<a href="mailto:webmaster@camug.com">webmaster@camug.com</a>
Software and Book Review		Jan Bredon	
Membership	Present	Carol Joliat	<a href="mailto:membership@camug.com">membership@camug.com</a>
Newsletter	Present	Liz Milford	<a href="mailto:newsletter@camug.com">newsletter@camug.com</a>
Computer 101	Present	Carol Joliat	
Ways and Means		Jan Bredon and Madeline Burkes	
Attending Club Members	Present	Bruce Klipec	
	Present	Gerry Schaefer	

### Review November Club Meeting Minutes:

Carol Joliat moved to accept the November Club Meeting Minutes as distributed at the meeting with a minor correction. Bernie Newsome seconded the motion. The Club Meeting Minutes were approved unanimously.

### Review the October Board Meeting Minutes:

Tim Elder moved to accept the October Board Meeting Minutes as published in the Newsletter. Carol Joliat seconded the motion. The Board Meeting Minutes were approved unanimously.

### Review November Club Treasurer's Report:

Bernie Newsome moved to accept the Treasurer's Report as emailed. Morris Dingman seconded the motion. The Treasurer's Report was approved unanimously.

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**Membership Report:**

Carol Joliat reported that there are currently 28 Member Families. Bruce Brugger and Cherie Parker have renewed their memberships.

**Discussion December 17<sup>th</sup> Meeting**

December Meeting is the Christmas Party. There will be no 6:00 PM Computer 101. The meeting will begin at 7:00 PM. **BE SURE TO USE THE NORTH ENTRANCE FOR THIS SPECIAL MEETING.** The meeting will consist of nominations and election of officers and board members for 2019 and the Christmas Party with our Giant Raffle. Each member family will be given one ticket for their attendance plus an additional ticket if bringing a food item for the covered dish dinner. Three cash prize envelopes, containing either \$50, \$35, or \$15, will be randomly added to the gift table for selection. No additional tickets are sold for this gift raffle, so each member family will have 2 tickets maximum.

**Old Business:**

None.

**New Business:**

APCUG: Liz Milford moved that we pay our yearly dues to APCUG. Carol Joliat seconded the motion, and the motion passed.

Future programs: The January program will be our second Roundtable. Members can share questions, ideas, and show their new technology if they desire. For the February meeting, Bruce Klipec and Dennis Smith will present information about Genealogy.

**Motion to Adjourn:**

At 7:55 PM Tim Elder moved to adjourn, Liz Milford seconded the motion, and the meeting was adjourned.

Submitted pending Board approval,  
Liz Milford, Secretary

Addendum: By email on December 1, Liz Milford moved to take advantage of a limited-time special offer from Gene Barlow for 5 licenses for Acronis True Image Standard or Advanced for \$50 to be used for the club raffle. Jan Bredon seconded the motion. On December 1 and December 2, emails from board members passed the motion. Dennis will order it.



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## About CAMUG

Our club is open to anyone with an interest in computers and technology. A household membership is only \$20 per year, and a visitor can attend two meetings free without any obligation.

Monthly meetings are held the third Monday of the month at Holy Cross Lutheran Church, 7707 Market Ave. N in North Canton, Ohio. Computer 101 begins at 6:00 PM and the regular meeting begins at 7:00 PM. At every meeting, we cover topics ranging from cell phones to computers and from software to the internet and networking. Board meetings are held the fourth Monday of the month at 7:00 PM at Panera Bread on The Strip. Members are encouraged to attend the board meeting although only board members can vote.

The club mailing address is CAMUG, PO BOX 80192, Canton, OH 44708, and the website is <http://www.camug.com>.

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CAMUG is a member of the Association of Personal Computer User Groups (APCUG) which is a worldwide organization that helps groups devoted to the world of technology by facilitating communications between member groups and industry.



## Membership Report

July 2018

by Carol Joliat



Total Family Memberships – 28  
Renewals: Bruce Brugger  
and Cherie Parker



### CAMUG Monthly Summary

Tim W. Elder, Treasurer 11/19/18

	Cash	Checking	Total
<b>Start Balances</b>	\$60.00	\$2001.60	\$2061.60
Total Income	\$36.00	\$21.00	\$57.00
Total Expenses	\$5.00	\$262.31	\$267.31
Transfer	<u>-\$31.00</u>	<u>\$31.00</u>	<u>\$0.00</u>
<b>End Balances</b>	\$60.00	\$1791.29	\$1851.29

### CAMUG Officers

President: Dennis Smith 330-477-5893  
Secretary: Liz Milford 330-896-4284  
Treasurer: Tim Elder 330-875-2323  
Senior Director: Carol Joliat  
Director: Jan Bredon 234-564-0045  
Director: Bernie Newsome 330-232-5083  
Director at Large: Morris Dingman  
330-877-1479

Membership: Carol Joliat  
Asst. Membership: Alice Lungociu  
Web Page: Mike Charney 330-833-0329  
Newsletter: Liz Milford 330-896-4284  
Tim Elder 330-875-2323  
Computer 101: Carol Joliat  
Ways and Means: Jan Bredon  
Madeline Burkes

## List of Members

Name	E-Mail
Albright, Jim	jima
Bredon, Jan	janb
Brugger, Bruce	bruceb
Burkes, Madeline	madelineb
Casey, Kathleen	kathleenc
Chapman, Lila	lilac
Charney, Michael	michaelc
Conley, Rose	rosec
Crawford, James W.	jimc
Dingman, Morris	morrisd
Elder, Tim	time
Hirst, Gina	ginah
Hirst, Robert	roberth
Joliat, Carol	carolj
Klipec, Bruce	brucek
Kramer, Cecelia	ceceliak
Kramer, Pat	patk
Krantz, David	davidk
Kravos, Mary Ann	maryannk
Lungociu, Alice	alicel
McCoy, Myra	myram
Meiser, Ann	annm
Milford, Elizabeth	elizabethm
Newsome, Bernard	bernardn
Noyd, Hal	haln
Parker, Cherie	cheriep
Ponzani, Doris	dorisp
Schaefer, Gerald	Geralds
Sell, Tom	toms
Smith, Dennis	denniss
Trompower, Gary	garyt

To email members, use the email  
name above followed by  
@camug.com

Visit our Home Page

<http://www.camug.com>

**Need help  
with your electronic gadgets?**



Canton Alliance Massillon Users Group  
Computer Users Group

## **Assistance for users of all ages and skill levels**

When: 3<sup>rd</sup> Monday each month

Where: Holy Cross Lutheran Church  
7707 Market Ave. N  
North Canton OH

Time: 6pm Computer 101 (Less Advanced)  
7pm Main Meeting

Ongoing topics include:

Computers

Tablets

Digital photography

Smart phones

eBooks

Toys & Gadgets

[www.camug.com](http://www.camug.com)