

— The Databus —

Monthly New/letter of

The Dayton Microcompter Association Volume X (New Series) Nº 7 (July 2020)

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Post Office Box 4005 Dayton, Ohio 45401 (937) 777-DMA1 (777-3621)

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Glady CAMPION Treasurer

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* = Newly elected or reëlected

Webmasters:

Mark CAMDEN & Brent KERLIN

Webmaster Emeritus: Dave LUNDY, †4/13/20 Established in 1976, DMA is a group of Dayton-area professionals and enthusiasts in the field of computing and digital information technology. General Membership Meetings are usually held on the last Tuesday of each month. DMA has a number of Special Interest Groups (SIGs) in areas ranging from digital investing and genealogy to the Linux operating system. Each SIG meets according to its own schedule. DMA is a member of the Association of Personal Computer Users' Groups (APCUG) and the Affiliated Societies' Council (ASC). Click on any of the logos—including our own (top left)—to go to that organization's Web site.





Submissions ...

THE DATABUS welcomes compliments, complaints, suggestions, and especially articles. We can accept articles in ASCII, or as attachments in Microsoft Word, Open or Libre Office Writer, or, yes, even WordStar (a word-processing program that goes back to about 1980!). Send articles to:

Editor@DMA1.org

All articles are subject to editing for spelling, grammar, usage, and space. Retain a copy of your work, as THE DATABUS cannot be responsible for loss. When articles are of roughly equal quality and importance, those by paid-up DMA members receive preference.

ALL REGISTERED TRADEMARKS, for example: the DMA Arrow, Chromebook, Linux, Snapseed, Windows, or Zoom, are the property of their respective owners. However, the Registered Trade Mark symbols (® or ™) have been omitted for better readability. The Editor occasionally inserts comments into articles. Such comments are sometimes preceded by the phrase: "Editor's Note," are usually in square brackets [like these], and are always in sans-serif type, like these paragraphs.

THE DATABUS is written and published by volunteers. We do not give professional advice on hardware, software, or network installation, repair, security, or troubleshooting. If you need expert assistance for your digital device, please seek the advice or services of a qualified professional.

July Meeting: 7:00 P.M., Tuesday, the 28th

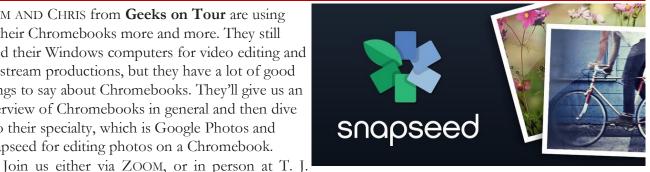
No Driving—No Parking—No Charge*

^k But see article below. This is a <u>dual-mode</u> meeting: via ZOOM, but also in person. Please come at 6 P.M. for dinner.

Geeks on Tour:

Editing Photos with CHROMEBOOKS

IM AND CHRIS from Geeks on Tour are using their Chromebooks more and more. They still need their Windows computers for video editing and livestream productions, but they have a lot of good things to say about Chromebooks. They'll give us an overview of Chromebooks in general and then dive into their specialty, which is Google Photos and Snapseed for editing photos on a Chromebook.



Chumps' restaurant 7050 Executive Boulevard, Huber Heights 45424, next door to the Meijer's supermarket. The restaurant is also accessible via RTA bus routes # 18 and 19, but you must take a short walk from Meijer's parking lot. The meeting begins at 7:00 P.M., but come at 6 if you wish to join us for dinner. Click here for a map.

Nominations for the **BOARD OF TRUSTEES** are open!

▲ OMINATIONS for DMA Trustees are open from May 1st **\text{\text{Intermediate}} through August 31st. Elections are held** for three positions on the DMA Board of Trustees at our Annual Meeting every September. Candidates must be 21 and regular or associate members in good standing for at least 12 months prior to the September elections. No prior experience is necessary.

Contact: **DMA-Board-2020@DMA1.org** or any officer at Tuesday's meeting!

inutes are normally published almost two months late, because the Minutes for, say, the June Board meeting must be approved by the Trustees at the *following month's* meeting —in this case, early July. The corrected and approved June Minutes would thus appear in the July DATABUS (this issue), published toward the end of the month.

Trustees' meetings are on the *first Monday of each month*, except when that day is a legal holiday, for example, Labor Day in September. For the convenience of Trustees who reside in Springfield, recent meetings have been held at **Fire Station #2, 2200 Commerce Center Boulevard**, in suburban Fairborn on Dayton's East Side. Click <u>here</u> for a map. They begin at 7 P.M., and are open to all DMA members, though only Trustees can vote. **In light of the ongoing epidemic, Trustees will probably hold their next (August) meeting using ZOOM**. Request ZOOM credentials (that's a fancy way of saying "an invitation") at the July General Membership meeting.

MINUTES—DMA BOARD OF TRUSTEES

Meeting of Monday, June 1, 2020

CALL TO ORDER

The ZOOM meeting was called to order at 7:06 P.M. by Peter Hess.

Trustees present: Martin Arbagi, Glady Campion, Edwin Davidson, Pat Flynn, Peter Hess, Ken Phelps, Gary Turner. Excused: Debra McFall. Absent: Brent Kerlin. Guests: Mark Camden.

OFFICERS' REPORTS

President – Peter Hess

Mark Camden and Edwin Davidson did a great job with their presentation on "Common Video Editing Techniques," an impressive feat considering the short time they had to pull it off.

John Kennedy of APCUG asked if we would extend an invitation to our monthly on-line meetings to the leaders of other APCUG member user groups. John will provide the contact information.

Peter will be a guest of St. Leonard's rehab center through July to allow his broken leg the time it needs to heal, but will be available by e-mail or text message.

Vice President – Ken Phelps

Ken has not been able to visit all the SIG groups, but has attended Dayton Dynamic Languages and Dayton Linux.

Secretary – Glady Campion

Glady presented minutes for the previous board meeting. Martin Arbagi moved the minutes be accepted. Edwin Davidson seconded and the motion passed with Glady abstaining.

(Continued on page 5)

July 2020 The Databu/ Page 5

ACCOUNT BALANCES:

Fifth Third Checking\$4,624.59

WPCU Money Market9,094.56

Pay Pal......316.78

TIAA Certificate of Deposit5,389.24

Invested with Dayton Foundation.....+94,027.09

5,749.30

2.235.12

20.93

Fifth Third Saving

WPCU Share

WPCU Checking

(JUNE MINUTES—Continued from page 4)

Treasurer – Pat Flynn

Pat presented the Treasurer's report:



COMMITTEE REPORTS

Audit - Glady Campion

In progress

Fundraising – Peter Hess

In progress

Marketing – Edwin Davidson, Pat Flynn, Peter Hess, Debra McFall

No press release this month due to Peter's accident.

Membership - Glady Campion

As of last month's General Membership meeting, we had 52 Regular, 3 Associate, 0 Student, and 4 Life members for a total of 59. Attendance for the Zoom meeting was 22 and there was no 50/50 raffle.

Net Administration Team – Ken Phelps, Gary Turner, Pat Flynn, Brent Kerlin, Mark Camden No problems with the website or Meetup to report.

Peter wants Glady to talk with DMA shell account owners to see if they know they have the account and whether they still want to keep it.

Programs - OPEN!! We need to find a Programs chairman!!!

Thank you to Mark Camden and Edwin Davidson for doing such a great job with their presentation on "Common Video Editing Techniques".

June - Peter is trying to schedule a speaker on Microsoft Teams

October is Cyber Security Month - we might try a speaker from APCUG

Other suggested topics: Virtualization, Deep Fakes, Streaming video, Car hacking, Chromebooks, Bitcoin and Block chain, InitiativeQ.com, Internet Architecture, Smart Home technologies.

Publications – Martin Arbagi

The May DATABUS has been posted online.

UNFINISHED BUSINESS

Wright State Archives - Martin Arbagi, Glady Campion

Still in progress

Next Board Meeting

The next Board Meeting will be 7:00 P.M. on Monday, July 6, 2020 via Zoom.

Fairborn Fire Station #2 has been reserved through December 2020 in the hopes that we will return as the epidemic abates.

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(JUNE MINUTES—Continued from page 5)

ThinkTV Auction – Gary Turner

The auction has been postponed to September 9-12. DMA donated a Levono Tab M10 10" tablet, which is listed on http://events.cetconnect.org/action-auction. It appears the auction will be broadcast from CET in Cincinnati. They are partnering with ThinkTV in Dayton.

Summer Picnic

Martin Arbagi reserved Shelter #3 at Indian Riffle Park for July 18. However, with Covid-19 still on the loose, the Trustees decided to cancel the summer picnic for this year.

New ZOOM Account - Peter Hess

Peter created a new Zoom account for DMA. Glady created an email alias, zoom@dma1.org that forwards messages to the Board members and to root, so problems can more quickly be handled.

Those about to use Zoom should make sure they have the latest version.

They should close unimportant apps and silence their phones before joining the meeting. Meeting attendees should leave their audio off until they decide to talk.

Out of an excess of caution, the DMA Picnic, originally scheduled for 18 July, has been CANCELED.





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Bluetooth 5.0 — Improved Wireless Technology

By Phil SORRENTINO, Contributing Writer, The Computer Club, FL www.scccomputerclub.org

Philsorr (at) yahoo.com



BLUETOOTH 5.0 is a noticeable improvement over the previous version and is finally finding its way into new devices. If you have had problems with Bluetooth pairing or staying connected in the past, Bluetooth 5.0 may improve or even fix the problem. But both devices will probably have to be up to the new standard.

Bluetooth is a wireless technology standard used for exchanging data between fixed and mobile devices over short distances. Both Bluetooth and Wi-Fi are examples of wireless technology that use the unlicensed 2.4GHz frequency spectrum. Both have many applications in today's offices and homes such as: setting up networks, printing, connecting cooperating devices, and transferring data files among computers and smart devices.

Wi-Fi vs. Bluetooth.

Wi-Fi is intended as a replacement for cabling in large work areas. Bluetooth is intended as a replacement for cabling among equipment in close proximity. Wi-Fi is intended for use as a local area network (LAN). Bluetooth is intended for use in a smaller, personal area network (PAN). (Just for completeness, a Wide Area Network (WAN) is a communications network that spans large geographic areas such as cities, states, or even countries — think Internet.)

Bluetooth, nowadays, can typically be found in smartphones, laptop computers, tablets, headphones, and almost all new cars. Seven years ago I explored Bluetooth and reassured everyone that it was not a dental diagnosis. At that time, it was at version 4.0 so it's probably time to take another look. Technology is always evolving and hopefully improving.

Here is a little history for you tech history buffs. Bluetooth has been around for quite a while. Work on Bluetooth was started in 1994 and the Bluetooth 1.0 specification was released in May 1998. The initial version specified a data rate of fewer than 1 Mbps (Megabits per second). It had many problems, and manufacturers had difficulty making their products interoperable. Bluetooth 2.0 was released in November 2004 with a faster data rate (approx. 2 Mbps). Bluetooth 3.0 was released in April 2009. Bluetooth 4.0 was released in June 2010. Bluetooth 5.0 was released in June 2016 with increased range, speed and capacity, and is the current standard. Bluetooth 5.0 is improved in many categories as shown in the table on the next page.

Bluetooth was originally conceived as a wireless alternative to the old serial RS-232 data cables. Bluetooth is a network and thus can connect many devices, unlike RS-232 which was strictly serial point-to-point. Bluetooth is a wireless technology that uses short-range radio links and is intended to replace the cable(s) connecting portable and/or fixed electronic devices. The hope is that it will allow for the replacement of the many proprietary cables with one universal radio link. Bluetooth can provide a way to connect and exchange information between devices such as Smartphones, lap-

(BLUETOOTH 5.0—Continued from page 7)

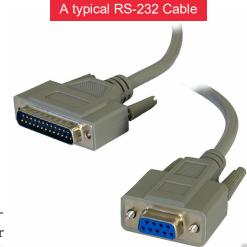
Feature	Bluetooth 5.0	Bluetooth 4.0
Speed	2 Mbps	1 Mbps
Range	40 Meters	10 Meters
Message Capacity	Larger	Small
Battery Life	Longer	Shorter
Reliability	Higher	Low
Security Control	Better	Less secure

tops, personal computers, printers, Global Positioning System (GPS) receivers, digital cameras, video games, et al.

So Bluetooth is a communications standard for interconnecting electronic devices. To that

end, it uses a form of data packet switching to transmit digital data via the wireless communications link. Bluetooth operates in the unlicensed ISM (Industrial, Scientific, and Medical) 2.4 GHz frequency band, and avoids interference from other signals in that band by hopping to a new frequency after transmitting or receiving each packet. This radio technology is called frequency-hopping spread spectrum. It chops up the data being sent and transmits chunks of it on up to 79 different frequencies. (Guess who invented frequency hopping? Answer at the end of the article.)

Bluetooth is primarily designed for short-range communications with low power consumption. There are three power levels defined in the standard, 100 mW (Class 1), 2.5 mW



(Class 2), and 1 mW (Class 3) where mW (milliwatt) is a measure of transmitter output power. The higher the power level, the further the data can possibly be transmitted. Class 1 suggests an operating range of up to 100 meters, Class 2 suggests 10 meters, and Class 3 suggests 1 meter. Most of the devices I've used have been Class 2.

Because Bluetooth devices use radio (broadcast) communications, they do not have to be in the line of sight of each other. Bluetooth makes it possible for these devices to communicate with each other and transfer the information as long as they are in range.

A PC uses a Bluetooth adapter to communicate with other Bluetooth devices. While some desktop computers and most recent laptops come with a built-in Bluetooth adapter, others require

(Continued on page 9)

(BLUETOOTH 5.0—Continued from page 8)

an external adapter, usually in the form of a Bluetooth Dongle. Bluetooth allows several devices to communicate with a computer over a single adapter. Microsoft Windows 10 supports Bluetooth 5.0, but your computer may have a Bluetooth device that was built to an earlier Bluetooth version. (Along with the Bluetooth version, there are Bluetooth Profiles, but we'll leave that as a subject for a future article.)

Though you may not have thought about it, here are some of the more common applications of Bluetooth:

- ✓ Wireless control of, and communications between, a mobile phone and a hands-free headset. This was one of the earliest applications.
- ✓ Wireless communications with PC input and output devices, the most common being the mouse and keyboard.
- ✓ Replacement of traditional wired serial communications used in test equipment, GPS receivers, medical equipment, Bar code scanners, and traffic control devices.
- ✓ A link between game consoles such as the Nintendo Wii, and the Sony PlayStation and their respective controllers.
- ✓ A link between a video camera and a remote Baby or Pet Monitor.
- ✓ A link between a Garage Door Opener Motor and the Remote Garage Door Opener Controller.
- ✓ An audio link between a Smartphone and speaker or headphones.

As you can see from this list, there are many reasons for computing devices to communicate with each other. And as more devices become smart, there will probably be more uses for the Bluetooth wireless technology.

Who invented frequency hopping? →

Trans year

Have a business card? Are you a DMA member?

ANY PAID—UP MEMBER of the Dayton Microcomputer Association is entitled to a *free* business card—sized advertisement in The DATABUS. Send a good—quality image (600 dpi or better) to Editor@DMA1.org, or give your business card to Martin Arbagi, the Editor, at any DMA meeting. We can embed a link to your Web site (if you have one) in the image of your card. Under weird IRS regulations, your Web site may not include discount coupons for DMA members, although discount offers may be included in the advertisement *itself*. See the example on page 6, which includes a member discount. But the advertiser (Steve Davis) could not have posted that discount on his Web site. It appears *exclusively* in The DATABUS.

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SOC - Save Our Connectors

By Greg SKALKA, President, Under the Computer Hood User Group, CA Drive Light newsletter www.uchug.org

President (at) uchug.org

In the early part of the 20th century, the internationally recognized way to signal that your ship was in distress was to send a radio telegraph message of three dots, three dashes, and three dots in Morse Code. This translated to "SOS", which, though selected as a distinctive pattern, became associated with the phrases "Save Our Souls" and "Save Our Ship." Though rarely used in Morse Code these days, SOS in the printed and spoken forms is still associated with distress situations.

When our tech devices are in distress, they seldom send us such a clear and unmistakable signal of their condition. We usually have to interpret indications of faulty operation to determine when and why our devices are having problems. One problem our devices can have is failing connectors. There are very few truly "wireless" devices in our technology collections; most involve connections through wires or cables at some point in their operation. Interconnecting, charging, and reading/writing data to devices almost always involves some wired connections. These wired connections are typically made through physical electrical connectors on the devices and cables, and unfortunately, these connectors, being mechanical, can and do wear out and fail, especially if frequently connected and disconnected.

We may think of our smartphones as wireless devices, and in most modes of operation, they are. They still come with an electrical connector, however, as that is the most convenient and sometimes only way to charge their internal battery and connect them to other devices for data transfer. The connectors used are usually USB, typically the large Type-A on computers and the smaller Mini, Micro, and Type C on portable devices, while Apple products use the small Lightning connector. These connectors have a rated life that often ranges from a thousand insertions or removals to ten thousand, with 5,000 typical for a good connector. Five thousand connections or disconnections for a connector's lifetime may seem like a lot, but if you charge a smartphone every day, that uses up two per day or 730 in a year. Connect to the phone three times a week to offload photos and you have over 1000 connections per year, meaning your phone's connector might work reliably for only five years.

If you bought a lower-end product, used poor-quality cables, or used less care in connecting them or protecting them while connected (allowing large side forces on the cable connector, for example), the lifetimes of the connectors will wind up being even shorter. Lower-cost devices and cables may use low-cost, less reliable connectors. Some connector types may be less costly to manufacturers but also less reliable (such as the now less frequently used USB Mini).

In the test engineering world, especially for military products, connector savers are often used to prevent the useful life of product connectors from being reduced by interconnections made in product testing and debug. Connector savers are small adapters with the same type on each end,

(Continued on page 12)

(CONNECTORS—Continued from page 11)

but with opposite genders. When plugged into a product connector, the connector saver presents to the world the same type and gender as the product connector. The connector saver is plugged into and removed from the product only once in the test cycle, with any necessary additional connections made during testing to the expendable connector saver.

To make your consumer electronic products last longer, you should extend the connector saver concept to your heavily used devices. I have had several perfectly good tech items become unreliable or unusable due to connector problems. Fortunately, there are ways to improve the reliability of failing connectors, as well as steps that can be taken to prevent connector wear failures and extend the life of product connectors.

For most of us, our smartphones are in constant use, sometimes requiring several charges per day. The risk of wearing out the power/data connectors (on device and cable) is significant if you plan to keep the phone for some time. The cable can usually be replaced when its connectors become unreliable, but when the phone's connector wears out, it usually cannot be changed. Fortunately, there are now some new products that follow the connector saver concept for USB Micro and C connectors, as well as Apple Lightning.

Search "magnetic charging cable" on Amazon and you will find some products that hold contact connections together using small but powerful rare-earth magnets. A small magnetic connector adapter is plugged into the phone connector; the cable connects to this adapter through a strong magnet in the cable end, holding them together. This saves the phone's connector as the adapter remains with the phone and the connection breaks between the two magnetic pieces.

There are cables for charging only (a two-wire connection) as well as cables for data transfer (four-wire). Most come with adapters for USB C and Micro, as well as Lightning.

I have been using a magnetic data cable with my Samsung smartphone for a month and it works well for charging and transferring data (I have used the Amazon TOPK data cable set and the power cable.) I have been using a magnetic data cable with my Samsung smartphone for a month and it works well for charging and transferring data. (I have used the Amazon TOPK data cable set and the power cable set by Terasako.

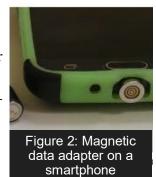


Figure 1: Magnetic Power Cable

Because these tiny adapters contain powerful neodymium magnets, care must be taken to keep them away from anything that is magnetically sensitive. The adapters are small and pose the same risks to children as small neodymium magnets.

Another connector saving option for smartphones, smartwatches, and tablets is the inductive charger. Many devices, including some from Apple and Samsung, follow the Qi wireless charging standard. A wire coil and additional circuitry built into these phones and devices allow a compli-

(Continued on page 13)

(CONNECTORS—Continued from page 12)

mentary charging pad to transfer power to the device through inductive coupling. Small wireless charging receiver pads can also be added to the outside of older smartphones (plugging into the normal charging connector) to make them compatible with the Qi charging pads. These wireless charging schemes eliminate connector wear, but inductive charging is less efficient (may take longer) than direct charging.



Figure 3: 3 different types of magnetic cable adapters

Though the magnetic charging cables work well, I've yet to find one that includes USB Mini in its adapter line-up. The USB Mini connector has a reputation for poor reliability, yet it has been used on many non-phone tech products. I have had three products so far with failed USB Mini connections.

I once had a set of three identical USB2 external, hardware-encrypted hard drives (2.5" drive form factor) that I used to store and back up my most important personal and financial data. The drives had USB Mini connectors on their cases and connected to PCs through USB A to Mini cables that came with the drives. After years of use (where I disconnected the cables from the drives when not in use), the cable connection to the drives became unreliable. Trading the cables around helped, as did twisting the cables to put more pressure on the connector, but eventually, I was forced to buy new USB3 drives and discard the old ones. My new drives have a different USB3 connector, but I now leave the cables connected to those drives.

I have a pair of rechargeable bike lights (front and rear) that I normally recharge at least once a

week; they have USB Mini connectors to their charging cables. Recently I have been having problems charging them; I've had to twist the cable around to make good contact with the connector in the lights. A USB Mini magnetic charging cable would help, but they are not available.

I was able to buy a small USB Mini to USB Micro or C adapters. I cannot keep these adapters on the lights as connector savers, as they are too big in this application, but the adapters do help make a better connection to the lights. I am presently using the adapters in conjunction with the magnetic charging cable; this has improved the reliability of the connection. Since I am still making



frequent connections to the light's connectors, I will no doubt eventually need to buy new bike lights. (Figure 4)

I have an auto dashcam (Figure 5) that I normally power from a battery through its USB Mini connector. For several years I frequently moved it between cars, disconnecting that Mini connection and eventually wearing it out. Fortunately in this application, I can use the same USB Mini adapter but leave it on at all times, disconnecting it at the magnetic charging/data cable. This seems to be more reliable, and I will now not have to wear the dashcam connector out any further.

Figure 5: Dash cam with adapters and mag cable

(Continued on page 14)

(CONNECTORS—Continued from page 13)

The USB Type-A receptacle connectors used on computers and laptops are very robust, but even they wear out eventually. I still run an XP computer as it supports interfaces and programs I cannot run elsewhere. I no longer have it connected to my home network, so I transfer files to and from it through USB Flash drives. After fifteen years of use, the two front-panel USB ports on the computer have become unreliable; I often must wiggle the Flash drives to allow them to be recognized. To provide continued access to the computer, I connected a cheap four-port USB hub into one of the computer's rear-panel USB ports. This provides handy access and acts as a connector saver for the rear ports. (Figure 6)



Figure 6: An inexpensive USB 2 hub with a flash drive

Though your device connectors cannot send a distress signal (other than by failing), you can help extend their lives by using the connector saver concept on heavily-used connectors where possible. Magnetic charging cables, wireless inductive chargers, adapters, and USB hubs can all play a part in reducing connector wear and keeping your devices running longer. Avoid connector disasters — SAVE OUR CONNECTORS!

Help DMA by using Amazon's "Smile" program!

Amazon isn't just for books any more!) has a "Smile" feature whereby Amazon donates a percentage of almost any purchase you make to a selected nonprofit organization. There is *no* extra cost to you. Click *here* to learn more or *here* to go directly to the sign-up page. Be sure to put DMA down as the beneficiary of your purchases.

About The Dayton Microcomputer Association, Inc. (DMA)

By Peter HESS, DMA President, 2018-2020

More Than Forty-four Years ago, a small group of computer enthusiasts from the Dayton, Ohio area gathered around a kitchen table looking at, and playing with, an early personal computer called the Altair 680 that one of them had purchased. This computer had been featured earlier on the cover of the January 1975 issue of *Popular Electronics* magazine. Paul Allen had shown the selfsame article about the Altair to Bill Gates, and later, they wrote software together for that computer. Still later — and still together — Allen and Gates founded the Microsoft Corporation.

Shortly thereafter, those Dayton-area computer enthusiasts joined together with many others to form THE DAY-TON MICROCOMPUTER ASSOCIATION (DMA), now one of the oldest (if not *the* oldest) continu-



ously-operating computer user groups in the world. Typically, computer user groups, and the newer iteration, technology user groups, are volunteer-run operations. The DMA is an all-volunteer led, organized, and run 501(c)(3) non-profit organization.

Now, there are hundreds of computer (or technology) user groups in the world, all of which continue to foster improved communication between technological equipment and software publishers, and users of their products. User groups (both computer and technology) provide an environment where more experienced technology users introduce additional and advanced techniques to novices.

DMA offers both monthly General Membership Meetings, which cover new and innovative topics including a wide range of generic, technological topics, and its Special Interest Groups (SIGs) which address concerns about specific technology interests. There are eight different SIGs sponsored by the DMA, covering such topics as the Linux operating system, various programming languages such as Python, the use of technology to investigate genealogy, and digital aids to investing. Neither SIG members nor attendees at DMA General Meetings need be members of the parent organization, though they are encouraged to join so DMA can continue providing its services to the public.

Annual dues for DMA membership, which have not been raised for decades, are \$25 for Regular Members, and \$12.50 for Family/Associate Members (someone living at living at the same address as a Regular Member). Nonvoting Student Memberships are *free* to students through age 22. Door prizes at General Meetings, picnics, banquets, and other DMA events, and both product and service discounts are available to all DMA members. ... TDB

Dayton Microcomputer Association Membership Form

_		10day s date//		
□ NEW	Please credit the DMA member who recruited me	9:		
☐ RENEW	Contact information below is new TY N			
	TYPE OF MEMBERSHIP)		
☐ REGULAR				
Name		_ Home / Work ()		
☐ ASSOCIATE		nber living at the same address as a		
Name		_Home / Work ()		
Email		Mobile Phone () -		
	Free Student membership is available to those u ducation. Name of School:			
Email		_ Mobile Phone ()		
City		State Zip		
Skills & interests you might share with DMA				
SHELL ACCOU	NT A shell account on the DMA web serve bsite, @dma1.org email alias (forwarding address aracters. The usual default is last name and first in	er provides file storage, hosting of a personal), all for a one-time fee of \$10. A username itial. no caps or punctuation. DMA reserves		
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-Zoom 101 Class-

The Zoom 101 class will cover the invitation, how to join a meeting, & what the functions of all the menu items are. You will learn how to use the CHAT, RAISE YOUR HAND, & other non-verbal cues, how to switch between the gallery & speaker views, start & stop your camera, & how to use a virtual background. You will see how to use Zoom on an iPhone/iPad or an Android device. Finally, you will learn about Zoom etiquette.

When: Jul 30, 2020 2:00 PM Eastern Time (US and Canada)

You MUST register in advance for this meeting at:

https://us02web.zoom.us/meeting/register/tZEtdeqtrT8sEtfnkzFysW_qrlYn5rv9G408

After registering, you will receive a confirmation e-mail containing information about joining the meeting.

From Kenneth Taubaugh, Columbus Computer Society Kenneth is giving the webinar.

Our neighbors in Licking County have once again opened up registration to the public for a FREE webinar called "All Things Zoom." The Licking County Community Center for 60+ Adults located in Granville, Ohio, is the sponsor. If you are interested in learning more about Zoom, this is the webinar for you. Seating is limited, so please register as soon as you can!

You have two opportunities to attend this event. Those dates and the registration links are listed below. You will receive the meeting link prior to the meeting.

Wednesday, July 29th, 2020, at 2:00 р.м. EDT -

Registration: https://forms.gle/Lb8U5gywsACCnQX26 Wednesday, August 5th, 2020, at 2:00 P.M. EDT - Registration: https://forms.gle/87H7tASA1ZSzTteZ6

JOHN KENNEDY, APCUG Board of Advisors, Region 3 (IN,KY,MI,OH,TN) & Region

6 (IL,IA,MN,ND,NE,SD,WI) YOUR communication link with APCUG

Proud Member of the APCUG Speakers' Bureau — APCUG VTC Zoom Host/Moderator

"Association of Personal Computer User Groups" (APCUG)

An International Organization of Technology & Computer User Groups

And remember: APCUG's Summer Virtual Technology Conference (VTC)—August 15, 2020

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