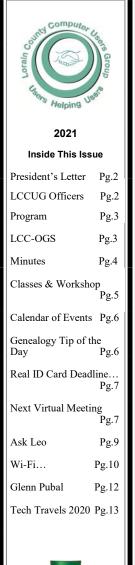
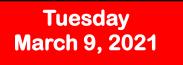
Lorain County Computer Users Group www.LCCUG.cominfo@LCCUG.com Volume 32 Number 3 March 2021











The Cloud is Here -Don't Get Left Behind

Judy Taylour

Member of APCUG's Speakers Bureau





UNTIL FURTHER NOTICE MEETINGS ARE HELD ON ZOOM DUE TO COVID19



Meeting opens at 6:00 PM, program starts at 6:30 PM

GENERAL MEMBERSHIP MEETINGS CONDUCTED VIA ZOOM VIDEOCONFERENCING

March 2021 Interface

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A Word From Our President



Our February meeting was very useful! If you aren't using a password management program, the free program Bitwarden might be the ticket. I know I'm going to try it. The recorded program can be found at https:// www.youtube.com/watch?v=ogCuneTuFLo

The LCCUG executive board decided at their February meeting to adjust the club dues so that they expire at the beginning of the year:

"In order to avoid confusion and make it easier to remember, the expiration date for LCCUG yearly membership will be moved to February 1st.

All members' expiration dates will be moved to February Ist and their dues adjusted on a pro rata basis based on their existing expiration date.

Hopefully, our members will have an easier time remembering when their membership expires. Just remember to renew at the end of the year."

Notices of your standing will be sent to you soon by email.

Hopefully, we will be able to meet again in person later this year. We would like to keep the ZOOM videoconferencing as an option and regularly make the meetings a "hybrid" with both options.

We are also talking about exploring another meeting location option since we've had trouble with the wifi at the Lorain High School/LCCC where we've been meeting. One possible location is 2 miles from there. If you have any ideas, let us know!

I know that I've been enjoying the topics and presenters that we've been having in our online meetings. Does anyone have some feedback for us? Send your comments to info@lccug.com . Reminder that recordings of most of our meetings this year are available on our club Youtube channel: https://www.youtube.com/channel/ UCyTfBzcxf9uNyNFDZI4HBlw

Another thing that I have been enjoying is the many online meetings that APCUG presents. This group, the "International Association of Technology and Computer User Groups", is a large group of member organizations like ours that we have been a member of for many years. They have proven to be a great resource for us this year. They provide the ZOOM account that we have been using. They also have been a source of many our speakers

LCCUG Officers For 2021

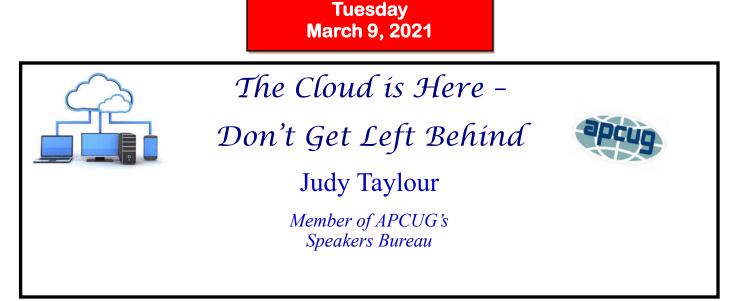
President	Sandee Ruth president@lccug.com
Vice President	Vacant vp-programs@lccug.com
Secretary	Don Hall secretary@lccug.com
Treasurer	Micky Knickman treasurer@lccug.com
Newsletter Editor	Pam Rihel newsletter@lccug.com
Web Page Editor	Richard Barnett webpage@lccug.com
Statutory Agent	Sandra Ruth statutory_agent@lccug.com
Director of Membership	Dennis Smith membership@lccug.com
Director of Advertising	Richard Barnett advertising@lccug.com
Director of Education	Neil Higgins education@lccug.com

for our monthly presentations. They also offer presentations that we can attend virtually and their frequent Virtual Technology Conferences. Recordings of many of their past presentations can be found at : https:// www.youtube.com/user/APCUGVideos, Give yourself a treat and check them out!

A reminder to those of you who are new to ZOOM and would like a practice session with me, let me know (info@lccug.com). You can do this from a PC, laptop, chromebook, iOS device or a smartphone. It's a fun way to participate and keep involved!!

Join us at our March 9 meeting when APCUG's Judy Taylour gives us a presentation on Cloud computing. Learn how you might be using it and how you can be using it!! I can't wait!





Are you using the Cloud? Many people still answer, no. We seem to need buzz words to define anything related to computers and this is one that seems to mystify people. You'll be surprised when you find out how much we are all using the Cloud and how much more is out there that we can take advantage of.

We no longer have just one computer, we have a smartphone, a tablet, and probably a second computer. How can we keep our data files in sync on all of them? We want to be able to share files with family, friends, and associates, but emailing them is not very efficient. Is there a better way?

THIS WILL BE A ZOOM MEETING

Please join us via ZOOM. A link to the ZOOM meeting will be provided in a reminder email to be sent a few days before the meeting.





Executive Board Meeting Minutes

FEBRUARY 2, 2021

The board Zoom video meeting for February was attended by Sandee Ruth, Don Hall, Micky Knickman, Pam Rihel, Richard Barnett and Neil Higgins.

Sandee suggested we take out the Information in the *IN*-*TERFACE* about Lorain High School being our meeting location. Pam has already done this,

Sandee has revised the list of raffle prizes available. She will make it available to officers when we start meeting again.

After discussing the issue Neil proposed changing the date that dues are paid from members. Instead of the date members joined the club, the date will be February 1st. Present and future members' fees will be adjusted to that date. Richard seconded the motion and the board passed it by voice vote.

Sandee viewed the APCUG Roundtable of January 13, 2021 and reported on 25 items of interest to the board. One item was how to automatically obtain an attendance list on Zoom which she passed on to Micky.

Neil mentioned a new computer store on Lake Ave., Elyria;.

Micky moved, Pam seconded the meeting be adjourned. Motion passed by voice vote.

Computer Club News

Don't Forget to Bring in Your Used Ink Cartridges LCCUG is collecting empty ink Cartridges



For every cartridge you will receive a ticket for our special drawing.

Recycle & Help Our Club Too!



General Meeting Minutes

FEBRUARY 9, 2021

President Sandee Ruth called the Zoom video meeting to order. A motion to accept the minutes as shown in the February issue of the *INTERFACE* was made Richard Barnett, seconded Neil Higgins. Motion passed by voice vote.

Sandee reported next month's program will be Judy Taylor of APCUG explaining cloud computing.

John Kennedy of APCUG presented a very interesting and informative program on password management using Bitwarden which is an open source, free or paid software program. The software can also be used to protect credit cards and passport information. He suggested using 'pass phrases' for greater security than 'passwords'.

There was no attendance raffle.





Member of Association of Personal Computer Users Groups



You shop. Amazon gives.

Thinking of shopping with Amazon? Well you can now go to our **lccug.com** website and just click on the amazonsmile link and start shopping.

Our club gets rewarded for any items purchased from our website. So the more you buy the better it is for our club. SO START SHOPPING.

NEED HELP? CALL FOR HELP



Here's Who to Contact:

Neil Higgins

440-985-8507 - higgins.neil@gmail.com

Evenings 6 p.m. -10 p.m. + Weekends Hardware, Linux & Windows Operating Systems, Chromebooks, Tweaking your system

Micky Knickman

440-967-3118 - micky@knickman.com Daily 6:00 am to 4:00 pm. Leave message if no answer. General Software Configuration, Hardware Installation, Basic to Advanced Windows

Richard Barnett

440-365-9442 - Richard216@aol.com Evenings & Weekends General Software Configuration, Hardware Installation, Basic to Advanced Windows & Web Page Design

Sandee Ruth

440-984-2692 - sandee29@gmail.com Basic Word Processing, Windows, & Web Design Advanced Internet

Pam Casper Rihel

440-277-6076 6:00 p.m. to 9:00 pm Monday thru Thursday Genealogy help prihel1947@gmail.com

Denny Smith

440-355-6218 - dennis.smith@windstream.net Microsoft EXCEL Leave message on machine if no answer

If any of our members are interested in helping other users with what programs you are adept at, please contact any of our officers with you name, what program or programs you would be willing to give help with, you email address and or phone number and when you would like to have them call

Newsletter Editor: Pam Rihel using Microsoft Publisher, 2013

This Month's contributors: Micky Knickman, Sandra Ruth, Pam Rihel, Don Hall, Dennis Smith, Neil Higgins, Michael John Neill, Phil Sorrentino, Scambusters, Greg Skalka, The Morning Journal, APCUG, Leo Notenboom, NEOPC, Microsoft Office art online, https://www.intivix.com/20computer-tricks-know/

Newsletter is now Online at:

lccug.com/newsletters or lccug.com

Woohoo!

Your renewal dues have been reduced from \$25.00 to \$15.00. When everything else is raising their prices our Computer Club is lowering their dues.

LCCUG ONGOING Workshop

ALL ARE FREE AND OPEN TO THE PUBLIC

Problem Solving Workshop

Date: Tuesday - March 16, 2021 Time: 5:30 - 8 pm Instructor, Micky Knickman, Neil Higgins, Richard Barnett Place: Lorain County Community College @ 2600 Ashland Avenue. Lorain

Learn how to repair or update your computer by changing hard drives, memory, CD ROMs, etc.

Members are encouraged to bring their computers anytime before 7:30 pm for assistance from Micky, Neil & others.

Learning About Electronics

Date: Tuesday - March 16, 2021 Time: 5:30 - 8 pm Instructor Sandee Ruth Place: LCCC @ 2600 Ashland Avenue, Lorain

Learn how use you electronic devices.

Members are encouraged to bring their tablets, iPod, kindles, etc. at 5:30 pm for assistance from Sandee and any other knowledgeable members. The public is welcome to sit in on these classes.

Learn About– Hands on Demonstration

Date: Tuesday- March 16, 2021 Time: 5:30- 8 pm Instructor: Neil Higgins Place: LCCC @ 2600 Ashland Avenue, Lorain

Do you know the specifications of your computer? What is really inside? We'll demonstrate three portable Windows programs (run from a USB Stick) that will tell a computer's storage. CPU, video, and other useful infor-mation (including your Operating System Product Key). This will help determine if your computer will run certain programs, and will help find out what memory or video card upgrade you need.

Please bring a flash drive to obtain software and handouts. If you would like to participate and get copies of the material for this presentation, please let Neil know by sending an email to Education@lccug.com.

March 2021 Interface

Lorain County Computer Users Group

2020 Calendar of Events

http://lccug.com email: info@lccug.com



Using Zoom Meeting opens at 6pm – program starts at 6:30

2nd Tuesday of each month. Changes are announced on the webpage and the newsletter. All meetings are open to the public

January 12, 2021, Avast & PC Security

February 9, 2021 Password Managers by John Kennedy from APCUG

March 13, 2021 The Cloud is Here - Don't Get Left Behind - by Judy Taylour

April 13, 2021 TBA

May 11, 2021 TBA

June 15, 2021 TBA

All other months to be announced.

Genealogy Tip of the Day

Michael John Neill Genealogy Tip of the Day Rootdig.com mjnrootdig@gmail.com

Is Your Data Entry Correct?

When using any genealogical database or information management software, make certain that any relationships you think you have entered correctly are actually displaying correctly.

Also if you do not know what something does, leave it at the original setting until you find out what it does and whether you need to change it or not. That prevents problems as well.

Public Details of Private Records?

One of the reasons newspapers are valuable resources for genealogists is because they are hard to "close" once they have been published. Court cases may be sealed, but a newspaper reference to that court case is "out" forever. A birth certificate may be sealed if there is an adoption, but if the baby's birth was in the local newspaper–it is still there.

If there's a record you cannot access, ask yourself what you are trying to find out or discover and are there other records that may provide that same information?



MEMBERSHIP WITH LCCUG:

Yearly dues are now \$15.00. For more information contact:

Dennis Smith Director of Membership, membership@lccug.com.



LCCUG WORKSHOP Class Ideas?



LCCUG'S NEXT VIRTUAL GENERAL MEETING WILL BE HELD March 9, 2021.

This is our eighth virtual meeting. We are hoping for more members to join in on these programs.

These meeting are fun and interesting and you also get to visit with other members that you have not seen in months, due to the Coronavirus - Covid 19 Pandemic.

It is not hard to join in on these meetings, as Sandee sends out the web address and all you have to do is click on it and when is opens up, find the icon that says JOIN, its as easy as that. Then Sandee will sign you in;

The Cloud is Here -Don't Get Left Behind by Judy Taylour

So please join in the fun on

Tuesday March 9, 2021 at 6:30.

If you are in need of some help, well just call one of the board members and you will be helped.

If there is a program you would like to learn about just let the officers know and we can fix you right up.

Hope to see new faces at our next meeting. You know we miss you all. Be there or be square...



Our links can be found at:

LCCUG.com/links, There you will find many interesting places to visit. Check them out and see what you can find interesting

ScamBusters.org

REAL ID CARD DEADLINE SPARKS SCAM SURGE

FAKE WEBSITES AND EMAIL/TEXT MES-SAGES EXPLOIT IGNORANCE ABOUT NEW REAL ID CARDS: INTERNET SCAM-BUSTERS #950

Real ID cards will soon become essential identification for air travelers and certain US-restricted access facilities. They'll also replace driver's licenses and DMV identity cards.

But because many people don't understand how they work and whether they need them, scammers have jumped on board to exploit their ignorance.

In this week's issue, we'll explain what the cards are, how they work, who needs them, and how to spot a real ID card scam. Let's get started...

REAL ID CARD DEADLINE SPARKS SCAM SURGE

The launch of a new personal identification system in the United States, popularly known as Real ID, is being targeted by scammers to steal from victims.

It's been a long time coming, but the final deadline for introduction is fast approaching, with many citizens either unaware or uncertain of requirements. This enables scammers to hoodwink them into paying more than they need or even to exploit their ignorance for identity theft.

Real IDs, which are really enhanced-security versions of existing driver's licenses or DMV identification cards, were mandated in the wake of the 9/11 tragedy. The new cards began to be introduced many years ago, as existing licenses expired. They require more security checks than their predecessors.

Some states set their own deadlines for introduction, but the nationwide deadline for full implementation is October 1 this year (after being postponed from October 2020).

This could lead to a scramble in the coming months by people who don't already have the replacements.

(Continued on page 8)

March 2021 Interface

And those who don't know enough about them are sitting targets for scammers.

REAL ID: THE FACTS

But don't panic if you're one of them. First, work your way through these 7 key facts:

1. First, you can tell if you already have a Real ID card by checking the top-right of the front of the card. If it's a Real ID, it will have a star in that corner.

2. Real ID cards are only required for air travel (domestic or international) and access to nuclear power plants and certain federal government facilities. You don't need one for other activities such as claiming benefits or registering to vote, though they will fulfill the same identification role as "old" driver's licenses, such as when you present a check.

3. If you're flying, an old-style card will still be acceptable (if it hasn't expired) but you will need an additional form of identification, such as a passport, military ID, or permanent resident card. 4.However, when your card expires, it will be replaced by the Real ID version. You can't opt out.

5. Cards are issued via individual states' DMV offices. Some states -- Michigan, Vermont, Minnesota, New York, and Washington -- issue more enhanced versions, which are also valid for travel to Mexico, Canada, and some Caribbean countries.

6. Real ID cards are not required for children under age 18.

7. Cards can't be replaced online or via a phone call. You can provide certain documentation via the Internet but still have to visit your local DMV office to complete your application.

REAL ID: THE SCAMS

Several state Attorneys General offices have issued warnings of a surge in scams during the past few weeks.

These include fake websites. As lines at local DMV centers continue to lengthen, more people are trying to get their cards online. Most bogus sites look very similar to genuine ones. But, as previously stated, you can't get your Real ID online, although you can submit certain documentation that could be dangerous in the wrong hands.

The fake sites don't say that, and they certainly want copies of your documents, which can be used for identity theft. People who are tricked into applying online may also be charged fees for work they could do themselves, such as making appointments. Others quite simply take your money and run.

Since original documents are required for a Real ID and if you don't already have your new card, you should start the application process at your DMV website to establish their requirements.

Make sure, though, that you're on your state's official DMV website. You can find a full list of these, with an interactive map, on the state of Nevada's website.

Scammers are also using SMS text messages and emails to target potential victims. Messages are sent out at random, telling recipients they need to replace or update their licenses and then directing them to fake websites.

The messages sometimes warn that drivers will be breaking the law if they don't comply with the request. They might also imply that the new Real ID is a legal requirement for any form of travel, even driving to your local supermarket.

It's also possible -- though there have been no reported cases so far -- that the scammers will pose as DMV officials or even law enforcement, telling victims they're being fined for not having the new ID. The aim is always to trick people into divulging personal information, make a payment or, in some recently-reported cases, upload malware onto the victim's computer.

It's simple to avoid this scam. Only provide online documentation when you know you're on the correct DMV site, using the Nevada link provided above. Better yet, just go to your DMV and take the documents there.

The only fee you have to pay is the standard amount for a new license charged by your state. If you want to know more or apply for a Real ID card, visit the website of your state DMV or the Department of Homeland Security.

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Can Hotel Internet Traffic Be Sniffed? It's as bad as open Wi-Fi.

by Leo A. Notenboom

Many hotels offer both wired and wireless internet, but with those hotel internet connections comes a security risk most folks don't consider.

My friend's husband has been getting into her email even though she's not given him her password. He has confronted his sister about an email and when asked how he got into the email he says that where he works (a large hotel chain), they have a program that searches emails for keywords and brings info up. Could that be true? Can they snoop on hotel internet traffic?

Yes.

Hotel internet security is one of the most overlooked risks travelers face. I'm not just talking wireless — I'm talking about *any* internet connection provided by your hotel.

In fact, I'm actually writing this in a hotel room, and yes, I have taken a few precaution.

Any internet connection provided by a hotel or other business or public place is as untrustworthy as an open Wi-Fi hotspot, and you should treat it as such. That means making sure all connections are encrypted, using a VPN, or using some alternate internet connection, such as your mobile data plan.

It's as bad as open Wi-Fi

I'll put it as bluntly as I can: hotel internet connections are just as unsafe as an unsecured "open" wireless hotspot.

Any hotel internet connection, wired or not.

There are two basic issues:

1: <u>Your ISP can see everything you do</u> When you're in a hotel, the hotel *is* your <u>ISP</u>, your <u>Internet Service Provider</u>. They provide your connectivity to the internet.

Thus, like a traditional ISP, they have the ability to monitor any and all traffic on their <u>network</u>. You must realize it's *their* network you're using. They own it, control it, and they have the right to monitor its usage.

Unfortunately, it also means employees can abuse their power to go snooping.

2: Your neighbors might be able to see everything you do.

This is less common. Depending on how the network is configured, it's possible you and the rooms around you are connected through a <u>hub</u>. The "problem" with a hub is that <u>it's a dumb</u> <u>device</u>; it sends everything it gets to everything connected to it.

When you send data through the hub, not only does the upstream internet connection get the data, as you want, but it's also sent down the wires to neighboring rooms. Computers there *should* ignore it, but it's there for the taking.

This is *exactly* like connecting to an open \underline{Wi} -<u>Fi</u> connection, where anyone in range can "sniff" your internet traffic. Staying safe while at a hotel So, what do you do?

Follow all the steps one should take to stay safe using an open Wi-Fi hotspot.

- Use a <u>firewall</u>. Make sure your Windows or other software firewall is enabled. The good news is that this is typically on by default.
- Use https. Only access sensitive websites using an https connection. This includes both sensitive sites like banking, as well as common things like email. The good news is that this is typically the default for most websites these days.
- Encrypt your email connection. If you're using a desktop email program downloading email via <u>POP3</u> or <u>IMAP</u>, or sending email via <u>SMTP</u>, make sure those connections are encrypted. Check with your email provider for the appropriate settings. The good news is that most email services provide them.
- Consider a <u>VPN</u>. A Virtual Private <u>Network</u> encrypts all of your communications through the hotel's network. The bad news (Continued on page 10)

is that this is an additional service you sign up for.

• Consider not using the hotel's network. If your smartphone can be used as a Wi-Fi hotspot, or if you can perform all of your tasks on your mobile device using your data plan, you'll bypass the hotel completely.

What I do

When I run an actual email program, such as Thunderbird, I make sure to configure mail server connections to use an <u>SSL</u> encrypted connection. My mail is secure.

For encrypted websites (those using https) I do nothing, other than make sure the connection remains "https" as I navigate from page to page.

For unencrypted (http *without* the s) websites, I do one of three things:

•Avoid anything that might be considered secure or sensitive.

•Use a VPN.

Use my mobile connection instead.

It's more than just hotels.

I've been talking about security in the context of hotels, since it's common for the traveling public to rely on the internet provided by the facility in which they're staying.

All of this applies to *any* internet connection provided by *anyone*. Everywhere, from a coffee shop or airport Wi-Fi to the internet provided by convention centers, libraries, and other public facilities, there's an IT department in the background able to examine your unencrypted internet traffic.

Whether or not they would take the time to do so is unknown, but as our original questioner found out, sometimes they do.

It pays to be aware and make conscious, hopefully secure decisions regarding your security wherever you connect.

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Wi-Fi 6 – What happened to b, g, n, ac?

By Phil Sorrentino, Contributing Writer, Sun City Center Computer Club www.scccomputerclub.org philsorr@yahoo.com



Ever since Wi-Fi appeared way back around 2005, the Wi-Fi version has been described by a letter because of the letter reference used in the 802.11 Local Area Network standard. Initially, there were 802.11a and 802.11b. Most of us became familiar with the "b" version because this version used the 2.4 GHz frequency band which had better coverage than the "a" version that used the 5 GHz frequency band. (Today many Wi-Fi routers provide networks at both 2.4 and 5 GHz.) So, until recently the version of the standard has been used as the version for the Wi-Fi router product. When there was only a and b, that was easy enough, but as time went on, faster and more capable standards were developed and each had a new designation, and now the standards are using multiple letters for the designation like ac, and ax (the latest).

To simplify the designation for products, the Wi-Fi Alliance (the group responsible for certifying Wi-Fi products) decided to use numbers to designate the version. The newest standard 802.11ax is to be known as Wi-Fi 6. Earlier versions will be called Wi -Fi 5 (previously ac) and Wi-Fi 4 (previously n), but you will probably never see those designations in practice. This may initially cause some confusion but eventually, it should be a simpler way of determining Wi-Fi product capabilities. Eventually, we'll all know exactly what the 6 in Wi-Fi 6 indicates; well, at least as well as we know what the "n" indicates in the n version of Wi-Fi.

Unlike many of the earlier Wi-Fi updates, Wi-Fi 6 is not just an increase in speed, it also provides the groundwork for future improvements that will ensure that Wi-Fi speeds continue to increase in the future. Wi-Fi 6 is just starting to arrive this year. There is a good possibility that it will be in your next smartphone or laptop. At some time in 2021, new Wi-Fi 6 routers will start to include 6E which will be the use of a new 6 GHz frequency band (I

(Continued on page 11)

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guess the E indicates an extension into the 6 GHz band).

So, what is Wi-Fi 6? Wi-Fi 6 is just the next **(** generation of the Local Area Network standard that will do the same thing past Wi -Fi standards have done - it will connect your many devices to the internet, but it will do that at faster speeds, and it will introduce new, faster and more efficient technologies into the router. Wi-Fi provides the critical link between our Client Apps and the internet Servers (remember Client-Server Technology?). Much of the improvements with Wi-Fi 6 are aimed at handling the demands of the Internet of Things (IoT). (In fact, very small networks might not even notice much of an improvement. A single Wi-Fi 6 device connected to a Wi-Fi 6 router may only be slightly faster than a single Wi-Fi 5 device connected to a Wi-Fi 5 router.) Another benefit of Wi-Fi 6 will be the fact that all Wi-Fi 6 certified devices will include WPA3, a new, stronger, Security Protocol that improves on WPA2 making it harder for hackers to infiltrate a network.

Many of our homes now have many devices that need to be connected to the internet. Think about it, there are smart bulbs, smart plugs, smart assistants (Alexa comes to mind), indoor and outdoor cameras (Ring doorbell camera comes to mind), door or garage locks, smart thermostats, door or garage door magnetic sensors, as well as laptops, desktops, smartphones, streaming devices (Amazon fire stick comes to mind), and tablets. The last time I had to change the password on my router, I had to change it in 23 devices before I was finished, though the number for an average house today is about nine. (I have seen predictions that the average home in the future may have up to 50 devices.)

Wi-Fi 6 introduces some new technologies to help mitigate the issues that come from putting tens of Wi -Fi devices on a single network router. Wi-Fi 6 has been designed to handle many devices efficiently, by splitting up the available bandwidth so that many devices can be serviced simultaneously. Without getting into any technical detail, Wi-Fi 6 will let routers communicate with more devices at one time, let routers send data to multiple devices in the same broadcast, and let devices schedule check-ins with the router, all features that will allow more devices to be serviced. Where current routers might start to get overwhelmed by requests from a multitude of devices, Wi-Fi 6 routers will keep all those devices up to date with the data they need.

Without the improvements that Wi-Fi 6 will bring, the performance of your future network would slow down as you increased the number of devices on a given network. You may even want to use the fact that things may slow down with your old router to your benefit and wait till you notice your internet connection "seems to be a little slow" before you take the plunge into Wi-Fi 6.

To get Wi-Fi 6, you'll need to purchase a new Wi-Fi 6 router. Without a Wi-Fi 6 router, all the devices that may be Wi-Fi 6 compliant will not have any advantage. To take full advantage of Wi-Fi 6, all the devices connected to your Wi-Fi 6 router will have to be Wi-Fi 6 compliant. So, the improvements we get from having Wi-Fi 6 will probably only slowly be incorporated into our internet experience, but it eventually will be worthwhile. New devices will slowly appear with Wi-Fi 6 incorporated, but it will probably take a few years to get to the point where your whole network is compliant with the Wi-Fi 6 standard (and by that time we'll probably be talking about Wi-Fi 7).

Just a brief review of the new technologies. Two technologies are helping speed up Wi-Fi 6. One is Multiple-input, Multiple-"Multi-user, output" (MU-MIMO), which is already in use in some high-end routers and devices, which allows the router to communicate with multiple devices at the same time, rather than broadcasting to one device, and then the next, and then the next, etc. Current high-end MU-MIMO routers can communicate with four devices at a time, Wi-Fi 6 will increase this to 8. (You have probably seen routers that incorporate MIMO because it involves multiple antennas, which let the router talk to multiple devices at one time.)

The second technology is "Orthogonal Frequency Division Multiple Access" (OFDMA) which allows one transmission to deliver data to multiple devices at once. Both of these technologies are used to get more out of each transmission from your router to your devices. Most of the details of these technologies will probably never become too

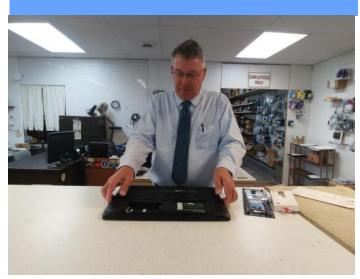
(Continued on page 12)

(Continued from page 11) Wi-Fi 6 What happened...

apparent to most of us, but we all will benefit from them in that we will be able to attach more and more devices to our router, without slowing it down, so we can enjoy the benefit of all the features provided by all of those wonderful internet servers.



News Bank



Royal Business Equipment in Elyria works to meet demand- Morning Journal, The (Lorain, OH) -June 29, 2020 June 29, 2020 | Morning Journal, The (Lorain, OH)

(Zach Srnis) With the novel coronavirus shutting things down and forcing folks to stay at home, the computer business has seen a surge. This is true for Royal Business Equipment in Elyria which experienced a rising demand for its services over the past few months.

"Our problem is availability of products; everything is on back order," said Glenn Pubal, who owns the store at 591 Cleveland St., with his brother Jeff Pubal. "Monitors, webcams, Chromebooks and more are on back order. "I have 4,000 Chromebooks on back order." Pubal said the coronavirus made having a webcam a necessity.

"April 1, all the manufacturers raised prices on notebooks," he said. "Anything with a webcam in it, we sold out in March because people were all working from home, and they needed to be able to use things like Zoom.

"We also are on back order for printers, which you think would not be too hard to get. I'm also waiting on an order of tripods for Berea Schools because some folks use tripods to prop up a camera for classes." Pubal said it has been frustrating not completing orders because of the high demand for computer parts and accessories.

"We got a lot of orders just sitting there, and it drives me crazy because we can't complete them because we can't get certain products," he said.

"The business went through the roof because of COVID, and no one really expected it because, frankly, kids were using (cell phones) and the computers went into the closet.

"Now, webcams are needed for the virtual meetings and the computers are needed for typing."

Pubal said the business was passed down from his father. "My dad (George Pubal) started it as Royal Typewriters," he said.

"He moved it out here from being in downtown Elyria. "The business went from typewriters, to calculators, to word processors ... computers and Chromebooks are probably the No. 1 thing we repair.

We had to make the transition to computers because we probably wouldn't be here if we were only doing typewriters."

Pubal said he gets a lot of business from local school districts.

"Our main bread and butter are school systems," he said.

"Almost any school system in the area, including Bedford, Berea, Bay Village, Sheffield, Keystone,

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North Ridgeville, Amherst and the list goes on and on.

"What helped us out with that is we got set up as a Lenovo authorized warranty service center a couple of years ago. The worst thing someone wants is to be calling someone from tech support in India who doesn't even understand English or someone who doesn't really want to help you.

"With Lenovo, they know they can bring them here and we fix them right here." Pubal said the business also sells refurbished computers.

"We've done a big business with refurbished computers," he said. Pubal said the business also has a retail side. "We also have a retail store for walk-in business," he said.

"We have laptops, monitors and different accessories and cords you may need.

"Amazon is our biggest competitor. But, I would encourage folks to give us a try for great price and customer service."

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President's Corner Tech Travels 2020



By Greg Skalka, Under the Computer Hood User Group September 2020 issue, Drive Light www.uchug.org president@uchug.org

I've written before about using technology in my travels over the years. Each trip I take seems to reveal new travel-related devices and services and new ways the tech things I'm already using can enhance my journey. But this is 2020, the year dominated by COVID-19. Life has had to take on a "new normal," and so has travel. While limited by the pandemic, there are still opportunities (and sometimes necessary reasons) to get away, and technology can still help, sometimes with new twists.

My aunt, who lives outside Grand Junction, Colorado, was to celebrate her 50th wedding anniversary in June, and her children wanted to host a celebration for family and friends. They moved the celebration too early July, hoping the pandemic's effects would diminish, but if anything, there was a resurgence of the virus and an increase in social and business restrictions. My mom (her sister) had a hospital stay in late May and for health, reasons had to give up any hopes of attending. As the oldest nephew or niece on the West Coast, I wanted to go to represent the family. I was looking forward to seeing my aunt and her family, cousins from Nebraska, and just getting away from the life-in-pandemic routine.

Planning Tech. As with everything in our modern lives, the Internet is the place to go for travel information. Online searching is the best way to get accurate and up-to-date information on health advisories where I would be trav-



eling, any travel restrictions, what is open, what has been closed due to COVID, where to stay, how to get food, and how to travel. Google Maps gave me answers to questions about road trip options. Airline and travel site searches filled in the information on air travel options from San Diego. I began creating my typical travel Word documents, listing options, and costs, which would eventually be pared down to one travel Word doc that would be my master plan for the trip.

I originally felt I would fly, but soon found it was expensive, didn't save that much time, and carried a higher coronavirus exposure risk than driving. Flying to the small airport in Grand Junction provided few and inconvenient flight options and was too pricey. I looked at flying on Southwest to Denver, Salt Lake City, Las Vegas, and Albuquerque, and though some flights were quite low in cost, the rental car costs for the final leg to get to Grand Junction were surprisingly expensive. To have the shorted drive I would fly to Denver, but the *(Continued on page 14)*

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cost to rent a car at that airport was almost three times the cost to rent a car locally and drive the entire way. Las Vegas had the bestcombined air and rental costs but it seemed silly to fly there and then still be less than halfway to my destination. In the end, my wife's concern about my flying and possibly being exposed to the virus in airports and on the plane tipped the scale to driving. Note that my wife was too afraid to travel in any fashion, so I would be going alone.

Transport Tech. While the drive of 830 miles one way could be made in 12.5 hours per Google Maps, I felt a solo straight-through trip might be risky, and so chose to break it into two days of about 6 hours of driving each. This would mean leaving on Thursday morning, driving two days, staying for the celebration on Saturday, leaving Sunday morning, and driving two more days, with a return on Monday afternoon. I planned to stay in St. George, Utah on the way out, as that split the driving time pretty much in half. On the return trip, I stayed in Cedar City, Utah, which gave me a 5-hour drive Sunday and a 7.5-hour drive on Monday. I did this to stay in a different town on the way back (variety) and to have a shorter drive on Sunday so I could possibly attend a local church service that morning before heading back home.

Since I'd found the local car rental cost was so



low (I highly recommend Costco Travel), I decided it was a better option than putting miles on one of my cars. The rental car would be newer and if

something did break along the way, I could just call Budget Car Rentals to get a new one and be on the road again. I got a 2019 Hyundai Elantra (intermediate class), and since I had space to bring anything I wanted (as compared to flying), I pretty much did. I brought two digital still cameras, a digital video camera, a laptop, and a Chromebook, as well as all the chargers and adapter cables to support them. After reviewing state restrictions on the Internet, I brought my dashcam to record my trip. Since I was unsure about how easy it would be to get meals on the road during COVID times,

I also purchased an electric cooler to take in the car. The Wagan Tech 24 Liter Personal Fridge/Warmer I bought off Amazon uses the Peltier effect to transfer



heat from one side of a special semiconductor device to the other when a current is applied. It runs on 12 Vdc, but I also purchased an AC to DC converter to run it in my hotel room. Placed on the floor of the back seat on the passenger side and plugged into one of the car's two 12V power ports, it kept my drinks and snacks plenty cold.

Car Tech. My rental car came with 20408 miles on it and lots of high-tech features my older cars lack, including a back-up camera, in -dash information system, USB port, blindspot detection, and lane-keep assist. The USB port and in-dash display allowed me to put my MP3 music files on a USB thumb drive, plug it into the car USB port, and play them. This was great for when I couldn't find a good radio station to listen to (which was most of the time). In addition to the USB port, the front console had two 12V power ports, so I could use one to power my cooler and one to power my smartphone (with the 12V to USB adapter I brought). I also brought a vent-mount phone holder so I could easily see my phone for navigation.

The blind-spot detection (BSD) and lane keep assist (LKA) were useful safety features. BSD uses radar sensors at the rear corners of the car to detect objects in your blind spots (behind and in the lanes to the right and left). When a vehicle is in either of those locations, an indicator in the side mirror lights up. If you have your turn signal on to change lanes when a vehicle is in the blind spot, it also sounds a warning chime. BSD also works in conjunction with the backup camera to provide a warning sound when something is behind or coming from either side when backing up, *(Continued on page 15)*

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even when out of view of the camera.

The lane keep assist feature helps keep the driver from wandering unintentionally into an adjacent lane. It uses a camera in front of the rearview mirror to monitor your lane position. When your car starts going into the adjacent lane (and you don't have the turn signal on, indicating an intentional action), the car applies a steering correction to keep the car in the lane, as well as sounding a chime. I let go of the wheel on some curves and it steered the car on its own. It does sense when the driver is not providing steering inputs and chimes if you keep your hands off the wheel too long, however.

This fancy car technology did give me some concern on my second driving day. I was heading east on I-70, through a particularly scenic part of Utah, when I heard a chime. A little orange triangle with an exclamation point in it lit up on the dash and the center text display put up a message, but it was only up about 5 seconds so I missed reading all of it. It said to check something. The car was driving fine so I waited for the next exit and pulled off, but couldn't figure out how to display that message again. I turned off the car, got out, and walked around it, but saw nothing wrong. I got in and started the car, and the orange triangle was gone. After continuing down the road a while, it lit up again, and again I missed what to check. On the third time, I finally saw that it said to check the BSD system. I saw that the BSD system was now off, but since I didn't consider it mission-critical, I proceeded on. I'm not sure if it had a problem at elevation or with temperature, but with the intermittent operation it finally came back on for good on my last travel day.

Navigation Tech. I love Google Maps, but I don't trust it (or the GPS satellite system, for that matter), so I brought AAA state maps. I also downloaded off-line maps for all the areas I would be traveling through in Google Maps on my phone, in case I lost cell coverage.

I only had three navigation issues my entire

trip, which is not too bad, considering how much I was using Google Maps. The first occurred only a few hours into my trip. I exited I-15 north of Pala in San Diego County to get some snacks out of my cooler and found Maps could not direct me back onto the freeway. Once I got on I-15, my position on the Maps display did not change though I was traveling north. I pulled off in Temecula and turned the phone off, then on. I'm not sure if it was the power cycle or perhaps I had run into a point where my phone could not see enough GPS satellites to determine its location, but that issue never happened again.

The second issue happened later that day. After leaving Las Vegas, Google Maps informed me there was a 30-minute delay ahead due to road construction; it looked to be near Mesquite, NV, which is on the border with Arizona. I resigned myself to a longer driving day than planned. As I approached Mesquite, however, Google informed me it had found an alternate route that eliminated most of the delay. I accepted the reroute, and it had me exit I-15 on the west side of town and travel through town north of the now barely crawling interstate traffic. A few other cars appeared to be routed with me. As we reached the east side of town Google directed me to get back on the now flowing interstate, but I found the on-ramp was blocked with temporary barriers. Google apparently didn't know this. I decided to continue on the road I was on, which appeared to be a frontage road, with a few cars following me. At first, Google said to turn around, but finally said proceed. After winding around through a somewhat scenic drive along the Virgin River for about 15 minutes we came to an open I-15 onramp. I guess I just needed to have faith.

My third nav miscue occurred in Grand Junction. I had made it there only on low-cost Costco gas, filling up in Victorville, Henderson, and St. George. With no Costco in Grand Junction, I used my Gas Buddy app to find a low price fill -up - a Walmart gas station. It was 15 minutes away, in the direction I needed to go. When I got to the location Gas Buddy had transferred to Google Maps, however, I found I was in a *(Continued on page 16)*

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high school parking lot. No gas there. As I turned and headed back the way I'd come, I saw a Walmart sign in the opposite direction that it had told me to turn. Not perfect directions, but close enough, I guess.

Lodging Tech. I stayed in Comfort Inns in St. George and Cedar City, UT, and in Grand Junction. In all locations, I had a minor issue with their free Wi-Fi. I could use my VPN when on my laptop, but not when using my Chromebook.

In all three places, the hotel Wi-Fi was not encrypted but required a password to be entered in a browser login page to access the service. This worked fine for both of my devices; I could then access the Internet. When I then turned on my VPN (I use Private Internet Access) on my Chromebook, I lost access to the web. Turning it off restored access. With my Windows laptop, turning on the VPN did not interrupt access. Fortunately, all activities requiring security (like email) were done through my laptop; I used the Chromebook only for general browsing. I have seen this before with the Chromebook, but I don't know if it is a problem with Chromebooks. the hotel internet provider (they might want to discourage VPN use), or my VPN provider.

Roadway Tech. I saw lots of online order fulfillment go by in my travels. Away from city traffic, it is easy to see that our tech companies



are well represented on our Interstate highways. I saw lots of long Amazon "Smile" and Walmart trailers, and a lot more of the dualtrailer trucks we only occasionally see on San Diego freeways. I also saw quite a few of the triple-trailer trucks (mostly FedEx) we don't see; these were like mini-trains traveling on the highways.

Traveling in a COVID World. The coronavirus added new twists to my travels. I had to make

sure I brought a supply of masks along with me. While safe in my car most of the day, I did have to venture out for food, gas, some sightseeing, and rest stops, as well as lodging each night. Used to the fairly restrictive rules of San Diego, I found adherence to that standard (especially mask-wearing) diminished the further east I went.

On the road in COVID times, I found it to be much easier to find food and drink than restrooms. Since they are now much more prevalent than gas stations, I used to think first of stopping at a fast-food restaurant when relief away from home became necessary. Now, with no indoor dining, travelers must look elsewhere. I found this out within the first few hours of my trip. Since I would be gone five days, I finished up the milk, rather than have it spoil. Big mistake. By Temecula, I knew I'd need to make a restroom stop soon. By Riverside, I was getting desperate. When I saw a Jack In the Box off the freeway, I pulled off. While the dining room counter was available for ordering, dining in was not allowed, and the restrooms were blocked off from the public by stacks of chairs. Back in the car, I searched on Maps for a McDonald's - same result. I then recalled what my wife, who works for a company stocking their products in Home Depot stores, said about their restrooms. I found a Home Depot in Riverside and found the relief I needed. After that, I paid as much attention to my bladder as to my stomach.



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