



# DACS.doc

A Computer & Technology Newsletter

June 2017

Volume 28, Issue 6

\$2.00

**Next Event: Tuesday, June 6**



**Demystifying the Technology  
of Still and Video Cameras**



# Directors' Notes

## Danbury Area Computer Society (DACS)

### Board Meeting Minutes Wednesday, May 3, 2017

The meeting was called to order at 7:04pm by the DACS President, Dave Green.

In attendance were Board members Richard Corzo, Bert Goff (Secretary & Treasurer), Dave Green (President), and Andy Woodruff. Dick Gingras was not present. The minutes were taken by Richard Teasdale.

(Names in italics denote responsibilities for actions.)

- The Minutes of the 3/8/2017 Board Meeting, as corrected, were accepted.
- The Minutes of the 4/5/2017 Board Meeting were accepted.

## Reports

- The Treasurer's report for April was discussed. Bert reported that at \$460 (less Paypal fees), dues receipts were much above those of April 2016, while year-to-date, receipts were exactly the same as for the corresponding period last year. However, 17 members are in arrears. Liquid assets currently exceed prepaid dues by about \$1,500.
- **Press Coverage:**
  - o Dave reported that press releases for the May General Meeting were sent out during April, and a response from the Daily Voice was received.
- **Website:**
  - o Richard reported that two infected files were found and removed.
- The Membership report was received from Jim Scheef by e-mail:

o 92 paid-up members (including 7 new), and 11 in-grace, for a total of 103.

o 38 people attended the May 2 General Meeting.

o No information was provided about how visitors heard of the meeting, e.g. via Meetup. Andy pointed out that this information should be collected.

o The board agreed that all DACS events and meetings should be listed on the website calendar and posted in Meetup. Bert volunteered to help one particular member concerning this requirement.

## Old Business

### • Programs:

o Bert is in conversation with a New Milford consultant who has Google Analytics expertise, and who may be available to present on the topic of Google products.

o Richard reported that he has not heard from John Adams in response to his inquiry about a presentation on the subject of Privacy & VPNs, and that John no longer works at Ridley-Lowell.

o Andy will contact the manager of the Samsung staff at Best Buy about a possible new presentation by them.

o Richard Teasdale will contact APCUG about a possible presentation by the creator of an iPad app for dementia sufferers and their families.

o Andy is in contact with an observatory in Westport to determine their interest level in speaking to a General Meeting.

o Richard will contact the WCSU west-side observatory about their interest level.

o Andy will contact a friend who develops smartphone apps about a possible presentation.

o Richard will contact Drew Kwashnak about a possible Linux-related or other presentation.

o Andy will contact a professional videographer who is a former DACS member about a potential cameras, photography, and videography session.

### • Members Directory:

o Will continue to be discussed at the May meeting of the Membership committee.

### • Renovation of the Resource Center (RC):

o No donation of used carpet has been received from Meadow Ridge Senior Living Community in Redding.

o Andy has identified a possible source for used furniture for the RC.

## Membership Information

*dacs.doc*, ISSN 1084-6573, is published monthly by the Danbury Area Computer Society, 65 Legion Rd, New Milford, CT 06776. Annual subscription rates: \$60 to regular members, \$40 electronic access (included in dues).

## Postmaster

Send address changes to Danbury Area Computer Society, Inc., 4 Gregory Street, Danbury, CT 06810-4430.

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The editors welcome submissions from DACS members. Contact Richard Teasdale (*dacseditor@dacs.org*). Advertisers, contact Charles Bovaird at (203) 792-7881 (*aam@mags.net*)

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Dick Gingras APCUG Liaison  
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**MEMBERSHIP COORDINATOR:** Jim Scheef ([membership@dacs.org](mailto:membership@dacs.org))

**RESOURCE CENTER:** (203) 748-4330 • **WEB SITE:** <http://www.dacs.org>

## HelpLine

Our former telephone HelpLine has been replaced by our web-based DACS Community Forum at <http://forum.dacs.org>. We have topic-specific forums where DACS members can post questions. Questions may be answered by Workshop leaders or other DACS members. If none of the categories fit your question, just post it to the Ask DACS forum.

### Topic

Linux

Desktop publishing and website design

Mac and iPhone/iPad/iPod touch

Online/small business

Single board computers

Smartphones & Tablets

Social media

Video capture/processing

Windows

### Forum

Linux Workshop

Web Site Design Workshop

Apple Workshop

Online Business Workshop

Single Board Computers

Mobile Devices Workshop

Social Media

Video

Windows Workshop

## New Business

### • Snacks for General Meetings:

- o Bert (snacks) and Dave (drinks) will make the arrangements in June.
- Bert recommended that a renewed effort be made to leverage social networking, for member retention and promotion of DACS. Bert will contact Linda Bourie to determine whether she has any specific suggestions.

The meeting was adjourned at 8:55 pm.

—Richard Teasdale



## DACS Community Forum

Ever wanted to ask a question and get an answer without waiting for the next general meeting? How about sharing news with other DACS members, or communicating with fellow participants in a SIG you attend?

The DACS Community Forum (<http://www.dacs.org/forum/>) is another benefit of being a DACS member, and it's open 24/7. Once you register there you'll be able to post questions, answers, and comments. You can even set up an RSS subscription to be notified of updates to the forums.

Try out the DACS forum today!

## June Meeting Preview

# Demystifying the Technology of Still and Video Cameras

Preview by Jim Scheef

**A**BOUT TWO YEARS AGO I bought a "good camera", the kind I've always wanted. Since then I've been reading about all the wondrous things it can do, but somehow, I'm no closer to producing the kind of results I expected. If



this sounds familiar, our June meeting may be your salvation. Returning DACS presenter, Mark Weiss, and our own Andy Woodruff will explain the underlying technology of modern cameras. If we understand what all the terms actually mean, the specifications will make more sense. Learning a little about how the technology works, it follows that we are not only more likely to buy the appropriate camera or video recorder, but also get better results when we use them. In their talk, Mark and Andy will explain some of the more interesting terms used in specifications of both still and video cameras, all in language we can understand.

The presentation is geared to take an interested novice to an understanding of mysterious camera concepts like:

- RAW & DNG files
- Debayering
- Chroma subsampling, such as 4-2-2
- Formats such as UHD and 4K
- Video codecs and video containers
- NLE Editing
- Rec. 709 and Rec. 2020 color spaces
- Video levels and IRE units
- 18% grey reference point
- SLog and color grading

In the process, they will explain some common misconceptions about camera specifications. Are more mega-pixels really better?

While cameras have become more automated, some things will never change - like the laws of optics. How does the aperture setting control depth of field? How does the "millimeters" of a lens determine how much you see in a picture?

As part of their presentation, they will show us some mid-level and high-level still and video cameras.

Mark Weiss owns two businesses, "MW HD Professional Video Productions" and "Amplifier Experts". The first specializes in high-quality sound and video recording of musical performances, while Amplifier Experts repairs and upgrades vintage and current audio amplifiers.



Andy Woodruff



Mark Weiss

Andy Woodruff has an MS in electrical engineering from Rensselaer Polytechnic Institute and an ScB in physics from Brown University. He is a licensed Professional Engineer in Connecticut and other states. His experience includes turbine engine instrumentation, downhole oilfield instrumentation, and medical devices, but what he really does is play and teach the cello.



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Try out the DACS forum today!

## Shop at Amazon Smile

and Amazon will make a donation to the Danbury Area Computer Society, Inc.



# May Meeting Review

## Drones and Their Future

Review by Andy Woodruff

AT THE MAY GENERAL Meeting, John Gallagher and David Baron treated us to an exciting presentation about drones. John is owner of The Hobby Hangout, a New Milford store that sells radio controlled devices. Both John and Dave have extensive experience in outfitting and operating drones of various types. For instance, John outfitted a drone for a client who uses it to look for sharks offshore. Dave used one of his drones to make a video for a home demolition company in Stamford, and the company uses the video in its advertisements.

John and Dave started their presentation with a description of the capabilities of several drones that they had on stage. All of the drones are battery-powered. Some also include a payload such as a camera. John and Dave started by describing a particular white drone that includes a 4K video camera with remote-controlled zoom. It weighs in at 6 lbs including the camera and batteries. A much larger red drone weighs 18 lbs.

John discussed a green "racing" drone that is capable of 100 miles per hour. He said it can accelerate from zero to 100 mph within just 20 feet! This review author calculates that this implies it can accelerate to 100 mph in just 0.3 seconds, with an acceleration force of about 14 times gravity! Not surprisingly, John commented that this drone is also hard to handle, especially when attempting to hover. This drone is optimized for racing. It therefore has a short battery life of just 6-7 minutes.

John and Dave continued their presentation with an extensive review of the uses for drones. Drones can of course be used for still photography or video filming, and many news organizations own their own drones. John and Dave displayed a spectacular Niagara Falls image that was taken by a drone from an angle that could not be filmed by conventional means.

*"A drone is essentially a flying robot. Witness the great interest in how robots will be helpful in coming years and then add the ability to fly; this is the drone."*

Drones can be useful in responding to medical emergencies and disasters. For example, a drone can act as a delivery vehicle for emergency supplies. This is not just a thing of the future; it is already starting to happen! The city of Toronto is currently setting up a system of 20 strategically-located drones that are each outfitted with a portable defibrillator. When a 911 call operator receives a call regarding a suspected heart attack victim, this system will quickly deliver a defibrillator. The system will deliver the device to the front entrance of any building in Toronto, within just 120 seconds after the 911 operator's decision to deploy it! Then the device provides the 911 operator with audio and video contact, and the trained 911 operator can guide a

lay person through the use of the defibrillator on the victim. John and Dave showed a video that describes this operation. More advanced future drones can be expected even to serve as aerial ambulances.

Drones have already been used for 15 years in farming, especially in Asia. Drones have advantages over conventional aircraft. For example, drones can accurately deliver insecticide in the right dosage to fruit trees, even on an individual tree-by-tree basis.

Drones can be helpful to fire and police departments. John participated in a local fire department emergency response drill; he flew his camera-outfitted drones and provided real-time aerial views of a large simulated fire. A conventional camera approach, based on an \$11 million vehicle outfitted with a 150-foot tower, was also attempted in the same drill. The conventional approach failed to work, because the tower did not deploy correctly. In this case, the drone was not only much less expensive than the conventional approach, but it was the only technique that actually functioned correctly!

Drones can be used in lifesaving. For example, a lifeguard can fly a drone to a drowning victim and direct it to drop a life preserver. The drone may be a preferable approach, because it can reach the victim much faster than the lifeguard could swim there. Drones can also be used in search and rescue activities. In this work, drones can even work at night by use of thermal imaging sensors. "Forward Looking Infra Red" (FLIR) can make a night-time image look as if it were taken at noon.

Drones can aid in surveillance of livestock and wildlife poaching. An African government currently employs drones to monitor its fences. When its security sensors detect a breach, a drone is deployed. The cost of a drone deployment is much less than the cost of sending a conventional helicopter.

A large drone can reduce fog on a runway simply by flying over the runway and creating sufficient turbulence to blow the fog away.

Drones can help with inspection and other tasks related to tall or inconveniently-located objects. John noted that there were 17 inspector deaths last year, mostly related to the conventional inspection of towers, wind farms, and bridges. These deaths would not have occurred if drones had been utilized instead. A drone can also be set up to determine the stone inventory in a stone supply yard. For this task, the operator locates an x-y coordinate on the stone yard and programs the drone to fly autonomously over each x-y point and measure the height of the stone pile at that

*Drones,, Cont. on page 8*



# Workshops

## Workshop Notes: June 2017

**Apple.** Focuses on all aspects of the Mac and iPhone operating systems.

**Contact:** Richard Corzo ([applesig@dacs.org](mailto:applesig@dacs.org)).  
Meets 2<sup>nd</sup> Tuesday, 7 p.m. at DACS Resource Center.  
**Next Meeting:** June 13

**Jobs.** Networking and jobs search

**Contact:** Charles Bovaird, 203-792-7881 ([aam@mags.net](mailto:aam@mags.net)). Go to DACS Community Forum (<http://forum.dacs.org>) for job listings.

**Linux.** Helps in installing and maintaining the Linux operating system. Also of interest to Apple owners using OS X.

**Contact:** Dave Mawdsley, [linuxsig@dacs.org](mailto:linuxsig@dacs.org)  
Meets 3<sup>rd</sup> Wednesday, 7:30 p.m. at the DACS Resource Center.  
**Next Meeting:** June 21

**PC Maintenance.** Review of PC hardware and OpSys maintenance and use.

**Contact:** Charles Bovaird, 203-792-7881 ([aam@mags.net](mailto:aam@mags.net)).  
Go to DACS Community Forum (<http://forum.dacs.org>).

**Online Business Workshop.** Informal member gathering sharing ideas on creating an online source of income.

**Contact:** Steve Harkness ([onlinebizsig@dacs.org](mailto:onlinebizsig@dacs.org))  
Meets second Monday in Brookfield, or by Webinar.  
**Next Meeting:** Check [dacs.org](http://dacs.org).

**Single Board Computers Workshop.** Explores small cheap computers like Raspberry Pi, Arduino, Netduino, Beaglebone, and more. Meets at 7:00 p.m. on the 3<sup>rd</sup> Thursday at the DACS Resource Center.

**Contact:** Jim Scheef (860-355-0034)  
**Next Meeting:** June 22

**Video Production.** The Video Workshop explores all aspects of video capture and production, including both inexpensive and professional choices for cameras and editing software.

Meets on the 3<sup>rd</sup> Thursday of certain months, typically at 7:00 pm at the Resource Center. Check the Calendar for details.

**Contact:** Andy Woodruff ([awoodruff@dacs.org](mailto:awoodruff@dacs.org))  
**Next meeting:** Check [dacs.org](http://dacs.org)

**Web Development/Design** We discuss a variety of subjects relating to web development, including Content Management software such as WordPress, Search Engine Optimizing, best practices when starting a web site, web graphics and more. Meetings start with a short presentation and “how to” of the evening’s topic. Questions are welcomed, and discussions liven up the evening. Meets at 7pm every 3<sup>rd</sup> Tuesday of the month at the DACS Resource Center. **New workshop leader wanted!**

**Contact:** Annette Van Ommeren ([avanommeren@dacs.org](mailto:avanommeren@dacs.org)) and see the DACS website for meeting updates.  
**Next meeting:** June 20

## Let's join heads!



Do you have a special technology interest you would like to share or learn more about? Join a DACS workshop or start one. You don't have to be a nerd or a guru—just have a curiosity for what's out there and an interest in sharing or discov-



ering with others like you. Just send an e-mail to [dacsprez@dacs.org](mailto:dacsprez@dacs.org), or talk to one of our officers at the next meeting, and say something like “I want to start a workshop!” or “Wouldn't it be nice if we had a workshop on . . . ?”

# June 2017

## Danbury Area Computer Society

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11	12	 <p><b>Apple</b> 7:00 PM Richard Corzo <a href="mailto:applesig@dacs.org">applesig@dacs.org</a></p>	14	 <p><b>Single Board Computers Workshop</b> 7:00 PM Jim Scheef 860-355-0034</p>	16	 <p><b>DACS.DOC Deadline</b></p>																																																																																											
18	19	 <p><b>Web Development and Design</b> Annette van Ommeren 7:00 - 9:00 PM <a href="mailto:avanommeren@dacs.org">avanommeren@dacs.org</a></p>	 <p><b>Linux</b> 7:30 PM Dave Mawdsley <a href="mailto:linuxsig@dacs.org">linuxsig@dacs.org</a></p>	22	23	24																																																																																											
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### *Drones, Cont. from page 5*

point; the operator transfers this information and a spreadsheet app performs a summation to determine the total stone volume. Regarding tasks other than inspection, a drone can even paint a cell tower.

We already have driverless cars, and we expect to shortly see driverless taxis. It is a short leap to also add the flying capability. This is the drone. In fact, Dubai already has a drone taxicab for hire!

In the future, we may rely on autonomous ground vehicles and autonomous drones for most transportation. In fact, children born today "may never need to get an automobile driver's license, because these self-driving vehicles will likely already be widely available!

There have been many news stories about future delivery services by Amazon and FedEx. John believes that in order to have sufficient battery range, drones in autonomous flights will generally need to be winged aircraft, not the helicopters that are seen in some news shows.

John said that the drone industry has "gotten beat up in this country", through media reports that typically focus on privacy issues and concerns about interference with conventional aircraft. No one was killed by a drone last year, but John and Dave pointed out that 147 people in the United States died last year in fires caused by toasters. John does not think the drone industry deserves the negative portrayal that it receives in the United States. The media in other countries are generally more supportive of the industry's potential.

There are three ways to operate drones:

- Direct control. The pilot maintains eye contact with the drone.
- "First Person View" (FPV). The operator controls the drone from the perspective of being in it, by use of real-time video supplied by an onboard camera to the operator. John and Dave commented that this makes it easier to operate the drone's control surfaces to maintain steady flight, without needing to think in reverse when the drone is heading toward the operator! However, they commented that it is also easy for him to lose track of the actual direction of flight in FPV; for this reason, some headset software apps include an onscreen arrow that shows the direction home.
- Autonomous Preprogrammed Flight. There is no human operator.

John and Dave continued their presentation with information about drone components and how drones work. Drones utilize lithium ion batteries, because this type of battery has a high energy density. They commented that a specially-outfitted drone

can be kept continuously aloft by the use of a ground-based laser to provide battery recharge power.

There are a variety of software options for drone operation, including both open source and proprietary software. A software system may keep track of the battery charge and warn the operator when the remaining charge reduces to the amount just necessary to get home. Some software systems will even bring the drone home autonomously; the simplest type of this software utilizes GPS to direct the drone to fly home in a straight line. This means that the operator must be careful that there is no tree, building, or other impediment in the straight path between its current location and home! Many software systems also provide hover capability: if the operator lets go of the control stick, the drone will simply hover and stay within an area of about a 3-foot radius. Recent models of hobby drones can follow a skateboarder through streets, using automatic control to track the skateboarder and avoid obstacles.

John and Dave reviewed government regulations on the drone industry and drone hobbyists. The Federal Aviation Administration (FAA) has spelled out requirements for drone operators, for drones that weigh more than 0.55 lbs, and for drone operation. The regulations appear in Part 107 of the Federal Aviation Regulations. A drone operator must have a remote pilot airman certificate with a small UAS (unmanned aerial systems) rating. Further, each drone must be registered, at \$5 for three years. The FAA assigns the same registration number to all drones owned by a pilot. Details are at [www.faa.gov/UAS](http://www.faa.gov/UAS).

The FAA's Part 107 regulations for drone operation include restrictions:

- Drones may not fly, without permission,

within 5 miles of an airport that has a tower. There are free phone apps that show a drone's position in relation to the closest airports, and there is a simple method to apply for permission.

- Drones may not fly within any national park.
- Drones may not fly higher than 400 feet, to avoid interference with piloted aircraft.

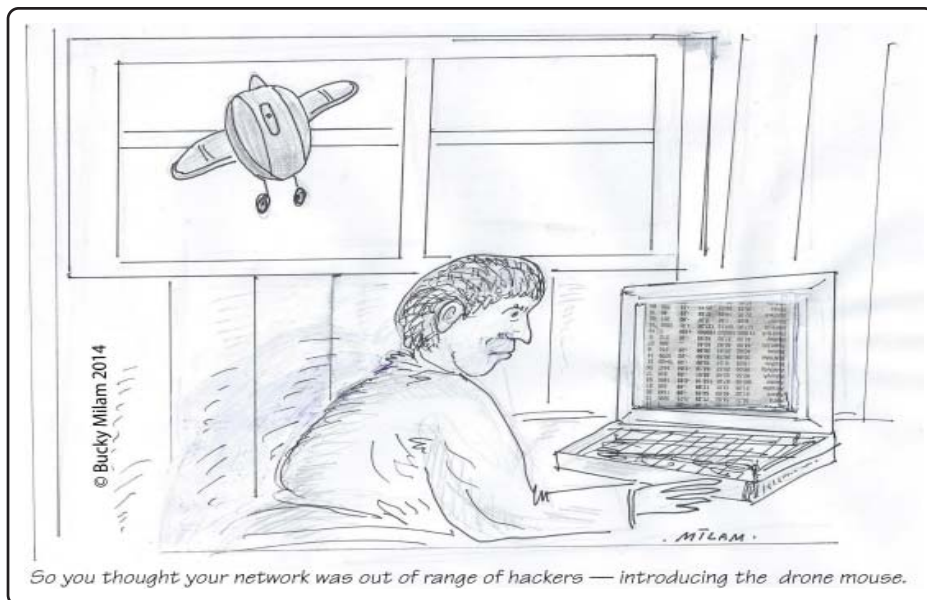
Some drone pilot software systems include a feature known as "Geofence" that automatically prevents the drone from flying within disallowed areas such as national parks and airport 5-mile radii.

John and Dave said a drone must have a parachute if it will be flown over a crowd. The parachute is set up to automatically deploy if the drone starts moving above a predetermined threshold speed toward the ground.

Liability insurance is available from four insurance companies. The going rate is about \$10/hour for a \$1 million policy. The operator applies for insurance on a phone app. The insurance company decides whether to approve the application based on factors such as the site and the weather. Only liability insurance is available; no insurance is available to cover damage to the drone itself.

John and Dave demonstrated a drone hovering. It maintained its x-y position by using its video camera view of the rug below it. It maintained its elevation by using a distance measurement from the rug. By eye, the drone seemed to be motionless.

John and Dave had many drones on display on tables at the front of the stage. After the presentation, attendees wandered among the drones. John and Dave brought two colleagues Steve and Jay, who are also expert drone operators. There were many opportunities to ask questions and see these drones close up.



# Smart Chaps' Apps

## Smartphone & Tablet Apps - Here are a few basic, useful ones

By Phil Sorrentino

**O**VER 10 BILLION SERVED. Remember this kind of advertising? It used to be said of hamburgers, but now it can be said of Android and Apple Apps. Apps, or what used to be called "Programs" or "Applications", are the software that makes Smartphones and Tablets do their magic. Apps either come pre-installed on the device, or are downloaded from either the Android Play store for Android



devices, or the Apple Store for Apple devices. About two years ago, the Android Play Store boasted over 600,000 Apps, and the Apple Store said they had over 1 million. (The App number probably represents the total number of Apps and Widgets.) Recently, I checked and the Android Play Store is now the leader with about 1.6 million, closely followed by Apple, at about 1.5 million. That's a lot of Apps. We, as users of Smartphones and Tablets, typically use only a small number of Apps. I read somewhere that the average Smartphone user has about 90 Apps on their phone. I just counted the Apps on my phone, and I have 84 Apps and 27 Widgets. If you're not sure of the difference between an App and a Widget, talk to someone who has attended the Android Smartphones and Tablets class.

So, it's Apps (and Widgets) that really makes these devices worth the investment. Without the Apps, the Smartphone would just be like a flip-phone - a portable device used to make telephone calls, and Tablets might not

even be viable products. The other factor that makes these devices so valuable is their ability to connect to the Internet. And, it is this connection that allows many of the Apps to do so many wonderful things. (Both Smartphones and Tablets can connect to the Internet via Wi-Fi, and the Smartphone has the added capability of being able to connect to the Internet through the cell phone towers.) But, back to Apps. (Because the Android family of devices has the lion's share of the market (around 65%), the rest of this article focuses on that family. However, much of the discussion of Apps, also holds for the Apple family of devices.)

Many of the Apps that you need to do basic things are pre-installed on the device, and available right out of the box. But many other Apps will have to be obtained from the Google Play Store (more on that in a minute). Because a camera is an integral part of both Smartphones and Tablets, a Picture Viewer is one of the very basic Apps. After all, most of us want to see the pictures right after we take them. (Instant gratification; can you imagine, it wasn't that long ago that we would send film away to a developer and we wouldn't get to see the pictures for two weeks, or so, after the pictures were taken.) Three popular and useful Picture Viewer Apps are "Photos", "Gallery", and "QuickPic". And by now, most of us realize that these cameras are capable of taking videos, as well as pictures, so a Video Viewer App is also a basic necessity. Two popular Video Viewer Apps are "Play Movies", and "VLC." And while we're talking of entertainment, most of us have digital music collections. The same digital music (.mp3 files) that we use on our home computers can be played on our mobile device, so you will need a Music Player App. Two popular Music Player Apps are "Music", and "Play Music". Another activity performed by these devices is to allow access to the internet, and as is similarly done on a computer; a browser is used for this. A browser is, maybe, not as useful on these mobile devices as it is on a computer, because when internet access is needed, the App knows the exact internet address to use. Apps rarely browse the internet; they typically do a limited set of things, usually with only one specific internet site. (For example, a Banking App only knows how to get to its specific Bank's Server and

no other server, and similarly the OneDrive App only knows how to get to the OneDrive Server and no other). But sometimes a browser is needed and so "Chrome", "Dolphin", and "Firefox" are browser Apps available for mobile devices.

Book reading is another form of entertainment that can be enjoyed with either a Smartphone or a Tablet, although the smartphone screen size may make this impractical. In order to read an electronic book, you will need a Book Reader App. The "Kindle Reader" App is a popular choice. With this App, electronic books of many different (file) types can be read on your mobile device. If you want to borrow books from the County Library, you'll also need a special App that helps you accomplish that task. This App is called Overdrive. These two Apps, for book reading, may not originally be installed on your device, so both of these Apps will have to be downloaded from the (Google) "Play Store". The Play Store App is probably the most important Apps installed on your device. This App is pre-installed on all Android devices and provides the ability for you to download and install any of the Apps that are available at the Google Play Store, all 1.6 million of them. (By the way, most of the Apps that are popular and useful are free. Some Apps do have a cost, but it is typically low, usually under \$10. All of the Apps mentioned here are free.)

One final App that I find to be useful is a File Manager. This may only be useful or interesting to those with a technical interest into the workings of the Android Operating System. But, if you are interested, this type of App provides insight into the organization of the files and folders on the device, somewhat similar to the way File Explorer provides insight into the organization of a Windows computer's files and folders. Two useful File Manager Apps are "Astro" file manager and "ES File Explorer." Both of these file managers provide a basic view into the Android organization, but not near the capability that is provided by File Explorer on home computers.

So, in summary, the basic useful Apps types are a Picture Viewer, Video Viewer, Book Reader, Music Player, Browser, and File Manager. A search of the Play Store will yield many, many possibilities, for each of these types. The specific Apps mentioned here are just suggestions to start with.

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# Back to Basics

## Using Windows (File) Explorer - Working with Single Files

By Jim Cerny

[Note: Please read this article with your computer! DO the steps and you will find it all much easier to understand. Otherwise you will forget. Trust me on this.]

**T**HIS IS THE THIRD of a series of articles on the basic use of Windows Explorer (known as File Explorer in Windows 10). In the previous articles we looked at the basic window layout when you open this app or program and we also talked about the two "panes" in this app window - the "Folder List" in the left pane, and the contents of a folder displayed in the right pane. In the second article we looked at the different VIEWS you can use in Windows/File Explorer and why I recommended the "Large thumbnail" view for pictures and the "Details" or "Detailed List" view for all other files.

Once you have learned how to explore your files and folders, how to FIND a file or folder you want, then you can WORK with that file or folder. Every file / folder has a NAME. You cannot have two files with the SAME name in the SAME folder. FILES take up computer space and contain data and information. FOLDERS are LOCATIONS in your computer or memory device.

Now open the Windows File Explorer app or program and find "Documents" (or "My documents") in the left pane and click on it once to open the contents of the Documents folder in the right pane. You should be saving all your documents and most files here. To SELECT a file for some action, left-click on it once in the right pane and the file name should be highlighted. (NOTE: If you double-click on a file name your computer will try to OPEN that file using your computer's default program or app for that file type). When people say "click" using the mouse, they always mean a LEFT-click. A "right-click" of the mouse is specifically stated as a RIGHT-click.

### DELETE A FILE

Ok, let's say you want to DELETE a file. As usual, there is more than one way to do the same thing. If you RIGHT-CLICK your mouse on the file name a menu of choices will appear for you to pick from. One of these choices will be "Delete" - and, if you CLICK your mouse on "Delete" it will

delete the file! (Another way to delete a file after you have selected or highlighted it is to left-click on the MENU option(s) at the top of the window). A file deleted from your C-drive will be placed in your Recycle bin from which you can restore it if you change your mind. This "Right-clicking" the mouse thing is really helpful in a great many places on your computer - whatever you right-click on, a menu of choices will appear. For example, if you right-click your mouse on your desktop screen you will get a menu of choices of things you can do with your desktop. If you right-click on an icon you will get a menu of choices of what you can do with that icon. To make this pop-up menu go away without making any choices, simply left-click OFF of the menu. So, to delete a single file, highlight the file by clicking on it (in the right pane of the window), then RIGHT-click on the file to get the menu of choices, then click on "Delete".

You need to understand how to delete files from other memory devices too. Suppose you have a small drive or a thumb-drive, camera or memory card is plugged into your computer - how do you delete files from them? Well, the same way. All you have to do is FIND the files. And we discussed that in a previous article. Remember ALL FOLDERS are listed in the LEFT pane of the window - simply scroll down until you find the memory device listed and click on that device (the entire memory of the device is one big folder) and the contents will appear in the RIGHT pane of the window. Click on the folders to open them, etc., until you find the files you want to delete. Files deleted from other memory devices (that is, NOT your C-drive) will NOT go to your Recycle bin, they WILL BE DELETED. So be sure before you delete anything.

### MOVE or COPY A FILE TO ANOTHER FOLDER

To MOVE a file simply DRAG the file to another folder. Dragging means placing your mouse arrow pointer ON the file name you want to move, HOLD DOWN the LEFT mouse button and, while you are holding it down, MOVE the mouse until the pointer is EXACTLY pointing at the destination folder. Then let up the mouse button. You can drag ANY file and drop it into ANY folder. But be careful! Only move and copy

files to YOUR folders (Documents, Pictures, etc.). Yes you can drag and drop a document file into a pictures folder, it is up to YOU to keep your files where you want them, the computer does not restrict your moving files. The starting folder is called the "origination" folder and the receiving folder is called the "destination" folder. If you DRAG a file from one folder to another you are MOVING the file and it will no longer be in the origination folder. But if you DRAG a file from a folder on one memory device, such as your C-drive, and drop it in a folder on ANOTHER memory device, such as a thumb drive, then it makes a COPY and the original file will still be in the origination folder. The file will now be in TWO places.

To ALWAYS make a COPY of a file, drag it while holding down the "ctrl" key on your keyboard, then it will ALWAYS make a COPY.

While you are DRAGGING the file, as you move the mouse you will see a small box which tells you if you are MOVING the file or making a COPY of the file and will indicate the destination folder. When you let up the left mouse button to complete the move, make sure the tip of the arrow is indeed ON the correct destination folder!

### CREATE A NEW FOLDER

This also is easy. You should be IN the folder in which you want to create the NEW folder. In other words, you should have clicked on the folder on the left pane into which you want to create a new folder. The contents of that folder will be displayed in the right pane. At the top of the window will be an icon that will create a new folder - look for it and click on it once. A NEW folder will appear in the right pane - the NAME of the folder will be highlighted, "New folder", and ready for you to type in the NAME you want to give it. Every folder has a name, so give it a good one. Do not use odd characters in creating your names, use only letters, numbers, dashes, and spaces.

### TRY IT NOW

Create a new folder and try MOVING files into it, one file at a time. Then move some of them back. You can drag a file to a folder in the LEFT or the RIGHT pane if you can see the folder. If you cannot see the folder you want, use the scrollbars so that you CAN see it. But remember a folder can be IN another folder, so you may have to open a folder to see it. Give it a try. Try making COPIES of files, and then DELETE the copies. Deleting files you do not need keeps your computer cleaner and easier to find what you need.

NEXT TIME we will look at how to work with MULTIPLE files - that is, deleting, moving, and copying SEVERAL files at one time. This is exciting stuff and makes it easy to make your own BACKUPS of all your FILES on another memory device and also to DELETE many files at one time. To get further help, go to Google and enter your question, such as: "How do I copy a file from one folder to another in Windows 10?" and you will get some great videos to watch too. It helps to be specific with your question.

Cleaning up your computer memory of files that you no longer use will save space and keep your computer running quickly. If you have seldom used files which you want to keep, copy them to another drive (a plugin portable drive) to free up space on your "C" drive. Just like your car or your health, your computer needs periodic maintenance!

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## Uncle DACS Wants You!

**President** - DACS needs new leadership. Most current board members have been president. Do you have ideas on how to make DACS better? Build your resume while helping to keep our club going. This is a big job, but it's not a solitary job.

**Vice President** - New position to help the president and eventually become the next president.



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**Painters** - Help complete the renovation of the DACS Resource Center.

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Help grow our range of workshops. Guru-level expertise is not needed, just a deep interest in a technical topic and a desire to learn.

For more information, contact any board member (see page 2) or email [dacsboard@dacs.org](mailto:dacsboard@dacs.org).

## Mac News

### Apple COREner

*By Gary Roerig*

Worth repeating . . .

**I**F YOU ARE ON AN iOS device (iPad/iPhone) please remember to NOT install anything from your Web browser (normally Safari)—especially anything that indicates Senior Discounts are available. I continue to see individuals who have clicked to install software from a Web page, which then installs a Profile and allows a dummy email mailbox to be setup and . . . Voila . . . hundreds of SPAM email arrives. So stick to installing from only two places...Settings, General, Software Update for Apple iOS Updates and the App Store (white Upper Case A on a blue background). You will be a lot safer, but remember, nothing is fool proof so use good judgment . . .

#### Considering New devices?

My best advice is go to a physical store such as Best Buy or an Apple Store and handle the device you are interested in - such as an iPad, iPhone or MacBook or even an iMac. Look at the screen size, feel the weight and then add some extra weight for a protective cover. Once you have decided on a model that best fits you, Google it and see what users are saying.

Then Google it for the best price and go for it. Come into the Saturday Help sessions or email [groerig35 \(at\) gmail.com](mailto:groerig35@gmail.com) if you want some more advice or help. And, as always, I am happy to help you setup the new device once you have it in hand.

#### Are iCloud and iCloud Drive the same thing?

Many Apple users are confused over "iCloud" and "iCloud Drive". Most have turned on iCloud Drive without understanding what it is used for. On the other hand, iCloud, which would probably be of more use, is often outright refused simply due to a misunderstanding of what it is.

So what are we talking about here? Well iCloud Drive lets you securely access all of your documents from your iPhone, iPad, iPod touch, Mac, and Windows PC. So no matter which device you're using, you always have the most up to date documents when you need them. For example, I store my training Word documents from my MacBook Pro on iCloud Drive, but rather than lugging my MacBook around, I can open and edit the documents using my very light iPad.

Now iCloud is also on an Apple Server under the same Apple ID you use - but it is a means of easily backing up iOS devices. The backups are always encrypted. There is no real difference between backing up to your computer or using iCloud, except iCloud is much simpler. When your iOS device is locked on WiFi and connected to power, the backup takes place automatically. When backing up to a computer, you must use iTunes and your power cable and manually select to encrypt. Remember to properly eject your device from iTunes before disconnecting the cable if you decide to not use iCloud.

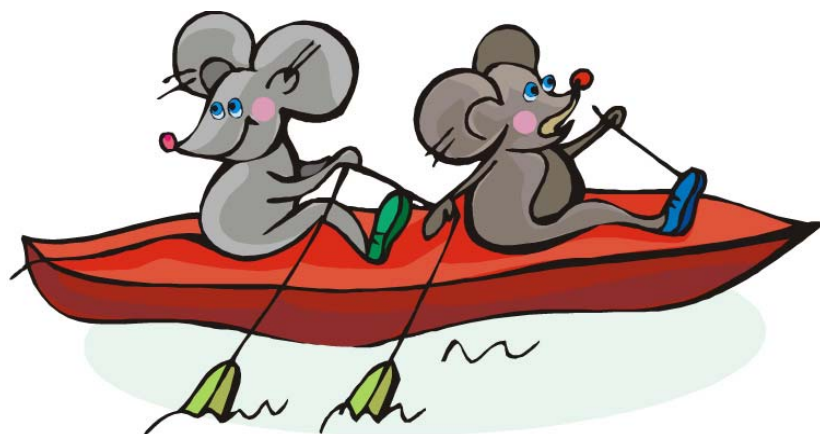
iCloud also provides a single repository for Contacts, Notes, Safari Bookmarks, Calendar items, etc. So, let's say you update Contacts or Calendar when on one device, it will update the same information for all Apple devices that are logged into iCloud under the same Apple ID. There is a catch to using iCloud—you are provided a total of 5 GB of free storage by Apple per Apple ID. After that you pay \$.99 per month for up to 50 GB. For me, having a "brainless" backup method and easy access to my documents regardless of the device I am using is worth the extra \$.99 per month.

**GARY ROERIG** is a member of Front Range PC Users Group (FRPCUG), Fort Collins, CO ([www.frpcug.org](http://www.frpcug.org); [twriterext \(at\) gmail.com](mailto:twriterext@gmail.com)).

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When you come to the next DACS meeting,  
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[www.voiceforjoanie.org](http://www.voiceforjoanie.org)

# Future Events:

**June 6**

Video Technology  
Andy Woodruff and  
Mark Weiss

**July 11**

iPAD App for Dementia  
Ed Fitzgerald

**August 1**

TBA

**September 5**

TBA