



August 2017

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Ken Johnson, Newsletter Editor



CALENDAR

SIG = Special Interest Group



This Week's Schedule

August 12 - Saturday - 1:10-2:50 PM

[General Meeting](#) - Leader: Ray Carlson

Location: Prescott Public Library; Founders Suite A & B

First Hour: Speech Recognition and Narration

One strength of Windows 10 is the set of apps that assist people with impairments or disabilities. If we do not need them ourselves, many of us know or will know in the near future a family member or friend who has difficulty typing or seeing a screen. A stroke, Parkinson's, muscle problems, a serious eye or hearing disorder and even limited typing skills can interfere with use of a computer.

We will demonstrate how to set up and reliably use speech recognition and narration through Windows 10 and Android devices. We will briefly consider how the availability of these assistive features causes Microsoft to continue to allow free upgrades to Windows 10 even after the deadline for such free upgrades expired. Finally, this discussion will allow a look at recent Windows news such as experimenting with eye control and upgrading inexpensive 10S computers to 10 Pro. We will omit political news.

Second Hour: Phil Ball will present Tips and Tricks with insights into various topics that assist with regular computer activity.

In addition to the presentations, the following are typical events which take place at our General meetings:

- 1) We hold an informal Flea Market in which you are encouraged to bring in your excess computer equipment or software and make them available for others to enjoy at no charge. Please deposit give-away items on the table in the back marked "Free Stuff." Any items left here at the end of the meeting are subject to disposal.
- 2) If you have items that are just too good to give away, you may set up a separate table and hold your own sale.
- 3) We conduct a raffle of gift cards at the end of the meeting, so make sure to get a pair of tickets from whoever is in charge and place one on the item you'd like to win.
- 4) We will also accept your used ink and toner cartridges for recycling. They are turned in to Think4Inc for credits which PCS uses to purchase office supplies from them.

Future Meetings: August 15 - Tuesday - 10:00-11:00 AM-Technology Help Hour - Leader: PCS Staff
Technology Help Hour - Leader: PCS Staff

Calendar Continued on Pg 2

Future Meetings, continued:

Location: Prescott Public Library Training Lab; Third Floor

Ask a technology question and get help from members of the Prescott Computer Society. Bring your own laptop or mobile device or use a library laptop. This is a weekly drop-in service and registration is not required.

August 22 - Tuesday - 10:00-11:00 AM

Technology Help Hour - Leader: PCS Staff

Location: Prescott Public Library Training Lab; Third Floor

August 26 - Saturday - 1:10-2:50 PM

[Smartphone SIG](#) - Leader: Murray Smolens

Location: Prescott Public Library; Founders Suite A & B

Murray Smolens will discuss Smartphone-related topics.

August 29 - Tuesday - 10:00-11:00 AM

Technology Help Hour - Leader: PCS Staff

Location: Prescott Public Library Training Lab; Third Floor

Note that these dates are correct at time of publication but are subject to change.



Prescott Computer Society
Officers & Board of Directors
2015-2016

Officers:		General Directors:	
President	Ray Carlson	Joan Baum	Murray Smolens
Vice Pres	Phil Ball	Jim Hamm	Dick Mason
Secretary	JB Burke	Ken Johnson	
Treasurer	Edi Taylor-Richards		

Drones

by George Harding Treasurer, Tucson
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I am amazed at the rapid development of the drone industry and the uses to which drones are being put.

Here are a few of the uses so far:

Package delivery: UPS has stated that their plan is substantially complete and will be introduced soon. It has limits for weight, distance, delivery address.

Weddings and other similar events: Drones make it easy to record events that are important to family and friends. Viewpoints can include those that an individual cannot do.

News gathering: Many TV channels now use drones to access accident sites and other events of interest to a broadcast.

Site inspection: Viewing construction as it is occurring is valuable to identify problems that may not otherwise be seen. Checking electric and other similar supports can be done with drones without the necessity of having a human climb up a tall tower to inspect.

Agriculture: Drones are used to check field sizes, crop progress and limited spraying, without the dangers associated with crop duster planes.

Police and Fire observation of sites: This saves the need for a human to be in danger.

Security: Drones can inspect premises to identify risks that would be difficult for a human to do quickly and economically.

Safety: Australia has started using drones to survey beach areas for sharks.

Photography: Drones can deliver video and photographs in high resolution of just about anything: Nature, colorful situations, traffic, events and more.

Search and rescue: Drones can access locations that are difficult or dangerous during severe storms, earthquakes, and hurricanes to find survivors and help with rescue.

With the FAA promulgation of Rule 107, individuals and business can operate drones with assurance that they will not run afoul of government oversight.

Some of the rules are:

Line of sight. The operator must keep the drone in sight at all times.

Night operations not allowed.

Maximum ground speed of 100mph and maximum altitude of 400 feet.

Drone must be lighter than 55 pounds

Operations in commercial airspace (airports, etc.) only with ATC permission.

Preflight inspection of drone required.

Remote pilot airman certificate required.

Pilot aeronautical knowledge required, unless the operator of the drone already has a pilot license.

Registration of drone required. Over 500,000 drones have been registered already.

Intel has made some interesting innovations in drone technology. They have available a ready-to-fly drone that incorporates their Real Sense technology. It allows the drone to see conflicts ahead and move to avoid them. So, instead of flying into a tree, its drone can see the tree and maneuver around it to keep on track for the target. See intel.com/aero for more info.

Intel is also working on the ability to control more than one drone at a time. At **Interdrone 2016**, a video was shown of a demonstration of controlling 100 drones at a time over the opera house in Sydney, Australia. It showed the drones circling around in what appeared to be a random pattern and ended with an oval of drones in the sky with "Intel" in blue drones in the center. Most amazing!

The drone market is exploding as to usage. There are many uses today for drones, but the future will open up many more, things we have not even thought of today. [Ω](#)

Inkjet Printers

By Dick Maybach, Member, Brookdale
Computer Users' Group, NJ
December 2016 issue, BUG Bytes

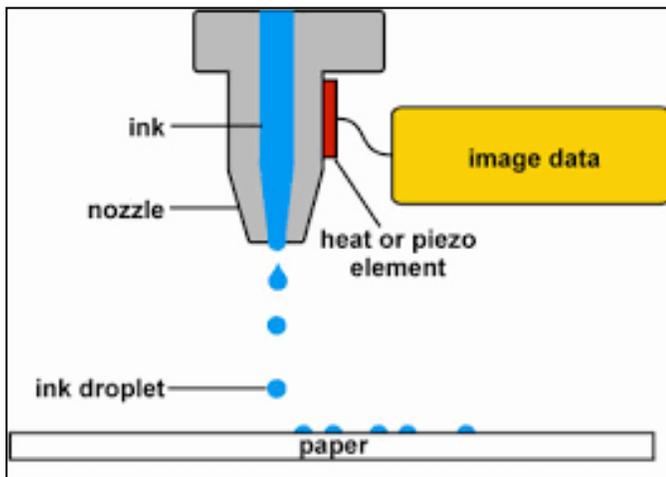
The inkjet is the most common type of printer used at home. These are inexpensive (although the ink is rela-

Continued on Pg 4

Continued from pg 3:

relatively costly), and they print color, including photos, with high enough quality for most users. The other common type for home use is the laser, which is more expensive (although the per-page costs is lower because toner is less expensive than inkjet ink) and require more power. For example, most UPSes won't power them.

Typically, inkjets use four inks, cyan, yellow, magenta, and black, with separate cartridges and print heads for each. The ink is ejected, one drop at a time, by either thermal or piezo-electric means. Thermal heads heat a tiny amount of ink and the resulting steam propels a single drop, while piezo-electric ones change shape slightly to propel an ink drop mechanically. The great majority of consumer printers are thermal, but they require compromises in the ink design, since it must endure high heat. See https://en.wikipedia.org/wiki/Inkjet_printing for a good introduction to the technology.



If you print only on letter paper, use Windows, and connect to a PC's USB port, almost any inkjet will give satisfactory service. Linux and Mac users and those networking their printer or printing on other media have to be more careful.

Printers are remarkably inexpensive, but my experience is that they have fairly short lives, and a printer is the PC component most likely to fail. Expensive models don't appear to last any longer than cheap ones, so unless you have special needs, buy something cheap. My inkjets always wait to fail until I've purchased a large supply of ink cartridges, which are never usable in the replacement, even a similar model from the same manufacturer. The defense

strategy is obvious; keep only a small supply of cartridges on hand. Although a set of ink cartridges will often cost more than the printer, you should buy a replacement set soon after you get a new printer, as many printers are shipped with only partially-filled cartridges.

The quality of off-brand cartridges varies, and some I've used tended to clog or fail in other ways. Refill kits seem to be disappearing, probably because printer manufacturers have devised schemes to discourage their use. You can buy re-filled cartridges, but here too the quality varies. Considering the low cost of printers and the high cost of name-brand ink, you may wish to explore here. Using other than your printer manufacturer's cartridges usually voids the warranty, so it would be wise to wait until the printer warranty has expired to experiment; after that you have little to lose. I do relatively little printing, and the frustrations of dealing with cheap cartridges are not worth the savings for me.

Be careful when buying other than letter paper, such as business cards or labels, as many are printer specific. Using laser stock in an ink-jet guarantees smearing. Download the manual before you buy a printer and check that it will do what you need, especially if you will be using other than 8 ½ by 11 letter paper. Despite what the manual says, non-standard paper sizes may not feed properly. I recently tried to print name-tags that came in 4 ¼ by 11 inch sheets. Although envelopes of about the same size printed fine, the name tags sheets would not feed. I had to fashion a custom guide, and even then, the feeding was far from reliable. My printer also would not feed card stock when I first got it, but this improved after a few days. Apparently, the feed rollers needed to be roughed up to work properly. Some printers don't like mixed paper in the tray. I've had problems mixing card stock and letter paper, even though both were the same size, but the manual warned against this. Many printers include a duplexer that implements double-sided printing. However, these often work only with standard-weight letter paper.

The most common problems are clogs and paper jams. Clearing an ink clog generally requires no more than

Continued on pg 5

Continued from page 4

running the printer's cleaning routine. (Again, see the manual.) This can sometimes be started by the proper dance on the printer's buttons, but may require a maintenance utility that you can install from the CD supplied with the unit. Unfortunately, these may not be available for OS X and are never available for Linux. Many Mac and Linux users have Windows available on a virtual machine or can dual boot to it. If you don't, do your research before you buy.

If you do experience a paper jam, don't yank, as this will almost certainly break something, and printer repairs are seldom economical. Instead, get on the Internet and find how to clear it. Similarly, do some research if you begin to experience paper misfeeds; often, this can be cured by a proper cleaning of the feed mechanism.

Some years ago, Windows-only printers were common. These had non-standard interfaces and required proprietary drivers, which were available only for Windows. The switch to USB has eliminated most of these, except for Canon. My experience is that no new Canon printer is usable with Linux. After a while, Linux developers may manage to reverse-engineer the interface, so that many older Canons are usable, but each new model requires a repeat of the process. At the other extreme, HP has traditionally been Linux friendly. If your operating system is not Windows, you may not have support software to do such things as checking ink supplies and trouble-shooting. However, printers are now beginning to include status displays and control panels to make them more OS agnostic.

All-in-one models that combine a printer with a scanner and a fax are common. Fax is quickly going the way of the dial telephone, which makes it, at least for me, a useless feature. I also prefer a separate scanner as I use this much less than the printer, and I feel it adds enough mechanical complexity to make an already failure-prone device even more so. Again, scanners are a problem area for Linux, and finding a compatible printer-scanner is more difficult than finding just a printer.

With respect to the interface, USB is almost universal, but many models also include Ethernet and/or wireless ports. The last two allow more than one computer to share a

printer; however, the configuration is sometimes not trivial. In particular, encrypted wi-fi can be troublesome (and you are foolish if you use non-encrypted wi-fi). WPS can make this easier, but be sure to disable it after you configure your printer, as it makes your network less secure. These networking ports are cheap to add and are unlikely to present a reliability problem, but unless you have some network configuring experience, you may find them unusable.

Again, read the manual, even if you print only on standard paper. For example, many printers must be shut down with their power switches. Turning off using the outlet strip into which they're plugged may lead to problems, such as ink clogs.

The promise of a paperless world has proven to be false, and few of us would be comfortable without a printer attached to our computers. However, their mechanisms are complex and subject to malfunction and failure, and they require more care than most other computer components. Spending a few minutes with the manual can extend the life of yours and will probably reveal new abilities.Ω

Google Search Tricks

By Melanie Birnbaum, Teckspert Talk,
Century Village Computer Club, Florida
<http://www.cvcomputerclub.com/>

You use Google Search every day, but still all you know is how to search. However, the search engine has plenty of tricks up its sleeve.

Here's an overview of some of the more useful Google search tricks:

Use quotes to search for an exact phrase.

Searching a phrase in quotes will yield only pages with the same words in the same order as what's in the quotes. It's especially useful if you're trying to find results containing a specific phrase.

Use an asterisk within quotes to specify unknown or variable words. Here's a lesser known trick: searching a phrase in quotes with an asterisk replacing a word will search all variations of

Continued on Pg 6

Continued from pg 5

that phrase. It's helpful if you're trying to determine a song from its lyrics, but you couldn't make out the entire phrase (e.g. "imagine all the * living for today"), or if you're trying to find all forms of an expression (e.g. "* is thicker than water").

Use the minus sign to eliminate results containing certain words. You'll want to eliminate results with certain words if you're trying to search for a term that's generating a lot of results that aren't of interest to you. Figure out what terms you're not interested in (e.g. jaguar -car) and re-run the search.

Search websites for keywords. Think of the "site:" function as a Google search that searches only a particular website. If you want to see every time TIME.com mentioned Google, use the search "Google site:TIME.com".

Search news archives going back to the mid-1880s. Google News has an option to search over 100 years' worth of archived news from newspapers around the world. The address is <https://news.google.com/newspapers?hl=en>

Compare foods using "vs". Can't decide between a burger or pizza for dinner? Type in "rice vs. quinoa," for example, and you'll receive side-by-side comparisons of the nutritional facts.

Filter search results for recipes. If you search your favorite food, and then click "Search Tools" right under the search bar, you'll be able to filter recipes based on ingredients, cook time and calories. It's the perfect tool if you have certain dietary restrictions.

Use "DEFINE:" to learn the meaning of words—slang included. Streamline the dictionary process by using, for example, "DEFINE: mortgage." For words that appear in the dictionary, you'll be able to see etymology and a graph of its use over time alongside the definition. Google will even sift the web to define slang words or acronyms. Try out "DEFINE: bae" or "DEFINE: SMH".

Play Atari Breakout by searching it on Google Images. The legendary brick breaker game is available for easy access on Google. Just search "Atari Breakout" (without quotes) on Google Images and enjoy.

Search images using images. Ever come across a photo that looks strangely familiar? Or if you want to know where it came from? If you save the image, and then search it on Google Images (with the camera button), you'll be able to see similar images on the web.

Press the mic icon on Google's search bar, and say "flip a coin" Google will flip a coin for you when you don't have one on hand.Ω



Computer Book & Magazine Recycling Service

Do you have old computer magazines or books that you don't need any longer? Bring them to a General meeting. Just bring your recent, but no longer wanted computer-related material to a general meeting. We suggest not bringing anything over a year old because they are out-of-date.

Anyone, including guests, can help themselves to any items on this table. There will be no charge for any items. After the meeting, remaining items will be discarded.



**Welcome to
NEW MEMBERS!
July & August
2017**

Rich & Seda Otto, Jim Robinson,