

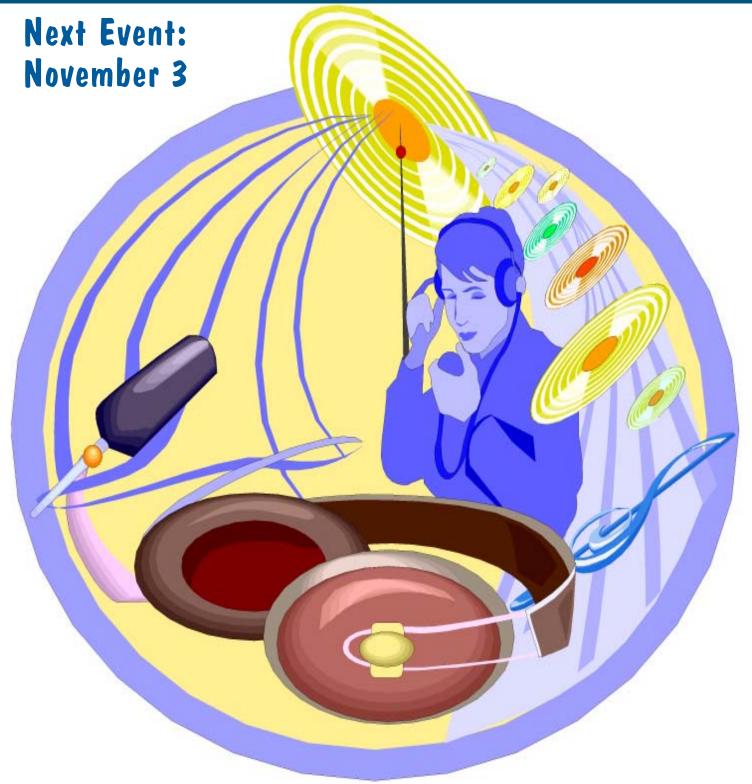
# DACS.doc

A Computer & Technology Newsletter

**November 2015** 

Volume 26, Issue 11

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The Intersection of Computers and Amateur Radio



## President's File

THE MAD HACKERS Technology & Innovation Fair on October 17th was a



Great success for DACS. A special thanks to Cathy Quaranta for organizing and executing this event. It took a lot of hard work on her part putting it all together. We had an impressive set of

posters that caught the eyes of potential members, creating a lot of interest and resulting in about 20 new leads.

I attended the APCUG annual convention and technical conference in Las Vegas at the end of last month (visit apcug2.org) and had the opportunity to compare experiences with other user group leaders. I returned with some fresh ideas for DACS and shared some of these already at a special Board meeting when I returned. One of these suggestions, which virtually every other user group does, is to restrict the monthly newsletter distribution to just members via email as a benefit of membership. DACS will adopt this practice, starting in November. Everyone who pays for the printed edition will still receive it, but our archived newsletters available on the website will not contain the three most recent editions.

The highlight of the APCUG annual convention for me was when DACS MADE A CLEAN SWEEP OF FIRST PLACE AWARDS for both our WEBSITE and our NEWSLETTER. This is a major accomplishment and recognition of the hard work and creativity of our two webmasters – Annette Van Ommeren and Richard Corzo and our Newsletter editors Allan Ostergren and Richard Teasdale.

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Our **Resource Center** is going through a facelift. Thanks to Cathy Quaranta, Linda Bourie, and some WestConn students who volunteered their time to help clean and repaint the walls to brighten things up. We are about half way done and still need your help to make it happen.

Linda Bourie is our new **WCSU Marketing Intern.** She has been assisting Cathy Quaranta and Tom Zarecki with Social Media and Public Relations, with the objective of creating more public awareness of DACS.

25<sup>th</sup> anniversary – We need your help! It still amazes me how many people never heard of us. I want to recognize Jim Scheef for creating our new Twitter account @dacsorg. Thanks Jim. We need to create a much broader awareness of DACS as we move forward to year 26. Talk about your ideas with Cathy Quaranta at the check-in table at our next general meeting or let us know by email. We have a proud and impressive history of serving members and the greater Danbury area.

Our **annual meeting** is on December 1<sup>st</sup>. We will be electing our slate of directors. If you are interested in being on the Board, please let me know.

There are still many activities on the back-burner just waiting for you to take ownership. We <u>urgently need you</u> to add value and help shape the future of DACS. Here are just a few areas where we must have your help:

- · DACS Board member.
- Program committee chairperson: Help arrange for new speakers, meeting previewers and reviewers. You will get to meet very interesting people in the process. Lisa Leifels will help you get started. Just tell me or Lisa that you may be willing to help, see Cathy Quaranta at the checkin table, or email us directly at programs@dacs.org.
- **SIG/Workshop coordinator** to coordinate workshop formation, venues, schedules, and expedite meeting reviews.
- Membership committee: Maintain the CiviCRM membership platform and ensure membership data is kept current. Explore and Implement ways to increase membership.
- Newsletter & Website Editorial staff, authors for meeting reviews, general interest and technical articles, book and product reviews and other articles.

Be proactive! This is your group so please take an active role in it.

From mobile to desktop, we inform, enlighten, and educate.

Dick Gingras, President

#### Membership Information

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Andy Woodruff

DACS, its officers and directors assume no liability for damages arising out of the publication or non-publication of any article, advertisement, or other item in this newsletter.

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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## HelpLine

Our former telephone HelpLine has been replaced by our web-based DACS Community Forum at <a href="http://forum.dacs.org">http://forum.dacs.org</a>. 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	Forum
.NET Programming	ASP.Net and C#VB.Net Workshop
Digital cameras/scanners/image processing	Digital Imaging Workshop
Content Management Systems	Drupal Workshop
Linux	Linux Workshop
Mac and iPhone/iPad/iPod touch	Apple Workshop
PC maintenance	PC Maintenance Workshop
Smartphones & Tablets	Mobile Devices Workshop
Virtual machine software	Virtual Computing Workshop

Desktop publishing and website design

Windows

## **Directors' Notes**

Danbury Area Computer Society (DACS) Board Meeting Minutes Wednesday, September 30, 2015

The meeting was called to order at 7:12pm by Dick Gingras. In attendance were Richard Corzo, Dick Gingras (President), Lisa Leifels, Cathy Quaranta, Tom Zarecki. Linda Bourie was present as a guest, and the minutes were taken by Richard Teasdale.

- The Minutes of the 9/2/2015 Board Meeting were approved.
- The September Treasurer's report was not available for the meeting.
- Given that several board members have resigned during 2015, and that Lisa will not be a candidate for re-election when her term expires in December, ideas for new board members were discussed. Dick will contact 2 potential candidates to ascertain their interest and availability.
- Dick proposed a motion to reduce the number of board members from 9 to 7. The motion was seconded by Richard, and carried unanimously.
- Dick provided an account of the APCUG conference in Las Vegas, which he attended immediately prior to the meeting.
- o DACS won first place in both the website and the newsletter contests sponsored by APCUG.
- o Several participants suggested that the DACS newsletter not be made immediately available to non-members - this practice is followed by other groups.
- Dick proposed a motion that the newsletter be e-mailed to DACS members, starting in November, and that the downloadable pdf copy be withheld from the website for 3 months. The motion was discussed at length, seconded by Richard, and carried by a vote of 4 in favor, 0 against, 1 abstained.
- Implementation of the new policy was discussed. Tom offered to write an article for the website and newsletter, to explain the new procedure to the membership. He will also send a press release concerning the APCUG awards.
- Linda has recently begun work as a Marketing intern for DACS. At Dick's suggestion, the board agreed to award her a free 1-year membership of DACS.

#### Committee reports

- Program committee:
- o Mike Walters is confirmed as the speaker for the November general meeting. Andy Woodruff to write the Preview. Dick Directors' Notes, Cont. on page 11

Windows Workshop

Web Site Design Workshop

## **Meeting Review**

## Anyone Can Make a Mobile Application!

By Andy Woodruff

IKE KALTSCHNEE regaled us once again with an informative and fast-paced presentation about mobile apps. After some introductory comments and background information, he said that he would show us how to build a working mobile application ... and that he could complete it in just a few minutes.

And he did, indeed. He started from scratch, and within 10 minutes had an app built and uploaded to his cell phone. The required time would have been even less than 10 minutes, if he had not carefully explained all of his steps to us! It was clear to all in the room that any one of us could do this successfully, easily, and for no cost.

Mike had discovered the system called "MIT App Inventor 2", which is free and designed for non-programmers to build apps for Android phones. Mike explained that this system is compatible only with Android phone. Apple's iPhones utilize the iOS operating system, and it is more difficult to build apps for that platform. In addition, MIT App Inventor 2 is not supported for the Internet Explorer browser; Sean demonstrated it on Google Chrome, and he signed in. The application runs in the browser, and data is stored in the Cloud.

In order to use MIT App Inventor 2, Mike opened its main application on his computer browser and downloaded its "companion app" (from the Google Play Store) to his Android cell phone This arrangement allowed him to design the app on his computer and test it live on his cell phone. Mike said it is possible to develop an



application without a cell phone connected, but he recommended this arrangement. He said it was necessary that both computer and cell phone be on the same network.

MIT App Inventor 2 provides a simple "integrated development environment" (IDE) that does not require any conventional programming skill. The "design" work involves simple drag and drop steps, using components that can fit with one another in only certain arrangements, similar to jigsaw parts or lego blocks. This approach assures that a user cannot "make a mistake" by connecting components incorrectly. When positioned correctly, the shapes fit and the components "snap" together.

There is a design window with a list of components on the left side of the screen and a list of controls on the right side. One simply opens a "new project" and then uses the mouse to pick up components from the left side and place them within the design in the center of the screen. Then one can adjust detailed properties, like size and color, on the right side.

In the first version of the app that Mike built in front of us, the cell phone greeted us by voice when a button was depressed. Mike needed to use only a few components from the left side of the screen. The principle item was a "TextToSpeech" component that caused the cell phone to speak words that Mike had typed into this component.

Mike demonstrated the ability to use sensors within the phone. For instance, an Android phone has an accelerometer (a sensor that can detect movement). Mike set up a second version of his app to recognize "shaking" and to complain verbally when Mike would shake the phone. ("Stop shaking me, please!") As another demonstration, he converted his phone into a sort of Etch-A-Sketch, by using the accelerometer's shake detection to erase the contents of his display. The audience loved this!

Mike emphasized that apps created with the MIT App Inventor 2 could access all or nearly all the sensors and features of the phone. In particular, a user can utilize the camera, media player, a barcode scanner, proximity sensor, orientation sensor, and the clock. The user can design apps that send texts or contact social media. As yet another example, Mike modified his app to show a ball bouncing around the cell phone display.

There are tutorials on the appinventor.mit.edu website. Mike said he

first learned of this app builder from his daughter, who is a school student.

Audience questions included:

- Can one add one's own code, rather than just using the drag-and-drop feature? Mike doubts that this is possible.
- How does one distribute the result to others? Mike said that one can save an .apk file. This is the standard for apps on Android phones.

Mike is an entrepreneur in technical fields, and he is a co-founder of Danbury Hackerspace. He has spoken to us on several previous occasions. Mike is available at *mike@danburyhackerspace.com*.



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!

## **Meeting Preview**

## The Intersection of Computers and Amateur Radio

By Andy Woodruff

Date: Tuesday, Nov. 3, 2015, 7:30 PM **Location: Danbury Hospital Creasy** Auditorium

**Presenter: Michael Walters** 

▼ PEND AN EVENING learning how computers are used in amateur radio! Mike Walters will tell us about amateur radio, how radio operators use computers, and how he provides emergency services based on computers and radios.

Mike is a licensed amateur radio operator and the District Emergency Coordinator for the regional Amateur Radio Emergency Service (ARES) that serves our part of Connecticut. He coordinates with the Federal Emergency Management Agency (FEMA) to provide emergency communications services for agencies such as the American Red Cross. Mike will explain the various terms and nomenclature used in this field, and no background in radio will be needed to understand his presentation.

Amateur radio, colloquially-known as ham radio, has changed dramatically as computers have become available. A few decades ago, ham operators used Morse code and sent postcards to confirm overseas contacts. They can still use telegraph keys with Morse code, but now they are more often using advanced radios that may be digital, computer-controlled, or even "software-defined" as explained below. The "radios" here are "transceivers" that both transmit and receive.

Amateur radio operators must still pass technical tests to obtain Federal Communications Commission (FCC) licenses. The general public is allowed to use radio receivers to listen on public radio channels, but only licensed amateurs are allowed to broadcast in two-way communication.

Mike plans to explain several ways in which computers are used in amateur radio. First, you will not be surprised to learn that computers are used for storing information that was once handled by hand-written records. Specifically, radio operators have long

kept records about each completed radio contact and even sent postcards to the street address of that contact. Now this confirmation is handled via an international database; each operator inputs the details about a particular completed radio contact, and the database matches the inputs from the two operators to confirm the contact.

Second, Mike will explain how computers can be used to control radios. For background, radios from two decades ago often had small displays and many buttons. In order to control a particular function, it was typically necessary to tap a button several times to scroll through menu options ... while also squinting to see a small display. This is now easier with computer-controlled radios, because those detailed functions have been moved out of the radio and onto a computer, where it is easier to navigate with a mouse and a large screen.

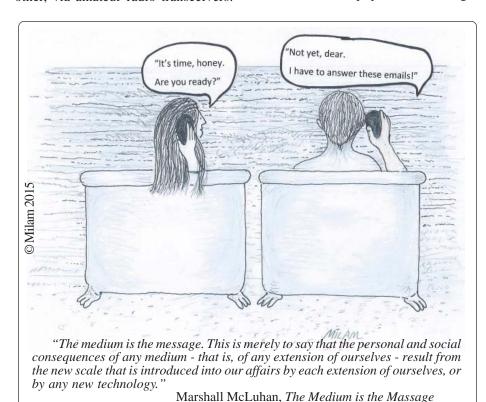
Third, he will explain computer-assisted communications, in which he sends data from one computer to another, via amateur radio transceivers. Specifically, he connects a computer's serial output port to the input of a radio transmitter ... and broadcasts packets of information to a distant radio receiver ... at the distant end, this receiver provides these data packets to a computer to complete the data transfer. In the past, radio amateurs used the old radio teletype (RTTY) to send data; now they can do computer-to-computer data transfers.

Fourth, Mike will explain softwaredefined radios. In this structure, much of the complicated signal handling and signal processing is moved from the radio hardware to computer software. This greatly simplifies the hardware, makes software upgrades possible, and enables much more complicated digital algorithms.

Fifth, Mike will explain how radio amateurs use computers to model the operation of devices, such as the radiation patterns of new antennae.

Based on the technical background described above, Mike will explain the role of computers in emergency communications. He is personally very involved in this field, and he coordinates a group of volunteers. Mike will explain how he and his colleagues send emails without use of the internet; how they use "repeater stations" on low earth orbit satellites; and how they use "gateway stations" to connect radios to the internet.

Mike will bring equipment to show. When you arrive at the auditorium, walk to the front to see equipment on the stage.



## Workshops

### Workshop NOTES: November 2015

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

**Contact:** Richard Corzo (*macsig* @*dacs.org*).

Meets 2<sup>nd</sup> Tuesday, 7 p.m. at DACS Resource Center.

Next Meeting: Nov 10

**Digital Imaging.** All about digital cameras, retouching, and printing using various programs.

[Note: SIG is suspended until further notice

Drupal. Covers all things on Drupal, the open source

content management system (CMS) Contact: Jim Scheef (jscheef@dacs.org).

Go to the DACS Community Forum - (http://www.dacs.org/forum/) within the Members only area.

**Next meeting:** Look for future announcements.

Jobs. Networking and jobs search

**Contact:** Charles Bovaird, 203-792-7881 (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

Meets 3rd Wednesday, 7:30 p.m. at the DACS Resource Center.

Next Meeting: Nov 18

**Mobile Devices/Windows 8.** Smartphones, tablets, and ereaders of all makes and models.

**Contact:** Richard Corzo and Jim Scheef (*Mobilesig @dacs.org*) Meets fourth Thursday 7 p.m. at the DACS Resource Center

Next Meeting: Workshop Suspended

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

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

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

**Contact:** Steve Harkness (http://forum. dacs.org/forum-38.html). Meets second Monday in nearby Brookfield, or by Webinar

Next Meeting: TBD

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

**Contact:** Jim Scheef (*ischeef@dacs.org*), or go to the DACS Community Forum: *http://www.dacs.org/forum/*, within the Members-only area

Next Meeting: Nov 19

**Social Media:** Master the basics of Facebook, Twitter, LinkedIn, and Instagram.

**Contact:** Tom Zarecki 914-548-4948; email *tomZshow* @ *gmail.com*.

Meets on the 4th Wednesday of the month at 6:30pm, usually at the DACS Resource Center, but check the monthly schedule.

Next Meeting: NOV 25

Web Design and DTP. The website design Workshop will be on hiatus starting November 2015 until April 2016. No meeting in November, and hope to start up again in April. Please check dacs.org or design.annagraphics.com for announcements early spring. Contact: Annette van Ommeren (avo@annagraphics.com) for information.

## **Workshops News & Events**

**Apple.** Apple released iOS 9 to run on iPhones going back as far as the 4s, iPads going back to the iPad 2, and iPod touch 5<sup>th</sup> generation and later. We discussed its common features as well as those unique to the iPhone 6s and 6s Plus.

First, there are new and updated apps in iOS 9. The brandnew News app asks what news sources or publications and subjects you would like to follow. Then every time you open the app it will serve up the latest news from those sources like a customized newspaper or magazine. The Notes app has been beefed up to be more like Evernote and Microsoft OneNote. You can insert photos, maps, sketches, and web links, as well as create checklists. It uses iCloud to sync your notes across iOS devices and Macs. To see these new features on a Mac, you'll need Mac OS X El Capitan, which was just released on September 30th. The Maps app now includes transit directions. Passbook has become Wallet and includes Apple Pay-supported credit cards you've added, as well as loyalty cards and boarding passes.

The iPad has gained new multitasking features like Slide Over that lets you view e-mails in the Mail app in a narrow window that slides in from the right, or lets you perform other tasks in apps that support Slide Over. Picture in Picture allows you to view videos in a small window superimposed over the full-screen app you're currently using. Split View allows you to

use two apps side by side on the screen. It only works on the latest iPad Air 2 and iPad mini 4.

I also brought in a new iPhone 6s. One very welcome improvement is an even faster Touch ID that unlocks the phone, enables access to supporting apps such as password managers and banking applications, and enables quick access to Apple Pay for paying in stores as well as for purchases within apps. Live Photos is a neat feature that combines a photo with a short video that begins 1.5 seconds before and ends 1.5 seconds after the photo is taken.

The most signature feature on the 6s and 6s Plus is 3D Touch. It senses how hard you are pressing on the screen. For example a firm press allows you to peek at an e-mail or a web link without leaving the list of e-mails or current web page you are viewing. Press a little harder and the e-mail or web page pops open full screen. If you firmly press the icon of a supporting app on the home screen, it will show you a context menu of shortcuts. For instance, the Mail app lets you directly open the VIP Inbox, search your e-mails, or start a new message without first opening the Mail app. Third party apps such as Instagram and Facebook have started adding support for 3D Touch, so it will become more and more useful over time.

—Richard Corzo

# November 2015

## Danbury Area Computer Society

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	General Meeting 6:30 PM	Board of Directors 7:00 PM	5	6	7
8	Online Business Workshop 7:00 - 8:30 PM onlinebizsig @dacs.org	Apple 7:00 PM Richard Corzo macsig @dacs.org	11	Membership Committee 7:00 PM Jim Scheef 860-355-0034	13	14
15	16	Web Design Annette van Ommeren 7:00 - 9:00 PM avanommeren@dacs.org On Hiatus until April 2016	Linux 7:30 -9:30 PM Dave Mawdsley linuxsig@dacs.org	Single Board Computers Workshop 7:00 PM Jim Scheef 860-355-0034	20	21  DACS.DOC Deadline
22	PR & Marketing Committee 6:30 - 8:30 PM	Windows 10 Workshop 7:00 - 8:30 PM onlinebizsig@dacs.org Cancelled	Social Media Tom Zarecki 6:30 - 8:00 PM tomZshow@ gmail.com	26	27	28
29	30			S     S     M     T     N       1     1     1     1       9     10     6     7     8       16     17     13     14     15     1       23     24     20     21     22     2	2015 W T F S 2 3 4 5 9 10 11 12 16 17 18 19 23 24 25 26 30 31	

## **Portable Computing**

## Drive for Change - Installing a Laptop Hybrid Drive

Greg Skalka,

IKE PEOPLE, COMPUTERS have a lifecycle. That lifecycle typically takes them from a youth of peak capabilities, through a middle age marked by a slowing down and perhaps reduced desirability to twilight years of diminished capacities, failing parts and obsolescence in the workforce. If your laptop is in the midst of a mid-life crisis, there are things you can do to turn back the clock and return a bit of that youthful capability and desirability.

I have a couple of laptops that are now three years old and don't seem as quick and capable as when I bought them. I buy on a value budget, so both the Fujitsu Lifebook LH531 for me and Lifebook AH531 for my wife were mid-priced computers bought on sale. Both had decent processors, Windows 7, adequate but not expansive RAM and hard drives and the typical interfaces of the 2011 computer era. They now seem a bit slower, are running out of storage space and don't have some of the new, faster interfaces to match my new accessories (like USB3). Should I continue to use them as they continue to slowly degrade, buy updated new replacements or upgrade them to add increased life and utility?

Fortunately, improvements in technology have led to falling prices in RAM and mass storage since I bought these laptops. I recently changed their RAM, doubling the amount in them from the original 2 GB, for a lot less than I probably would have paid for more memory three years ago. Now I'm looking at changing the 500 GB hard drives they came with to larger and/or faster mass storage.

It seems to me that these are constants in the computer user experience:

- You can always use more storage space
- The computer can always be faster

As luck would have it, available sizes for hard drives have been steadily increasing over the years as the-per unit cost of storage has been falling. In addition to magnetic spinning platter drives, solid-state drives (SSDs) are now available; these have much faster access times and can greatly decrease boot times and improve the performance of storage-intensive computer activities. Like hard drives, SSDs have also increased in size and dropped in price over the years. Unfortunately, the price drops have been proportional, so as SSD costs have come down to make them more attractive, so too have hard drive prices, so the choice for me has not been an easy one. Increasing my storage to a 1 TB hard drive in these laptops would now cost only about \$60 each, but

a 1 TB SSD is currently around \$300. I could speed things up with a 240 GB SSD for around \$100, but would then have less than half the storage space I have now. It does not look like SSD prices are going to drop dramatically compared to magnetic hard drives and put them out of business anytime soon.

A new class of mass storage promises to provide the best of both worlds - large storage at a low cost, with much faster access times. It is called the hybrid drive or solid-state hard drive (SSHD), and it combines a magnetic platter hard drive and solid-state Flash memory in one device. With the addition

of 8 GB of NAND Flash to the hard drive's controller card, the most often accessed data is stored in the solid-state memory, reducing access times for a lot of critical disk operations. Now two of the three hard drive manufacturers, Toshiba and Seagate, offer these hybrid drives (so far Western Digital does not). Seagate claims their SSHD can boot in 22 seconds, when compared to an HDD (hard disk drive) boot of 37 seconds and an SSD boot of 21 seconds. A 1 TB hybrid or SSHD is currently available for around \$80, which is not much more than an HDD, but a lot less than an SSD of the same size.

For my wife's laptop, I recently installed a Toshiba MQ01ABD100H 1 TB hybrid drive. It doubled the storage space, while reducing the boot time from 90 seconds to 33 seconds on average. For my LH531 laptop, I'm choosing a Seagate ST1000LM014 1 TB hybrid drive. The process I used to change drives was:



LH531 Cover Off

1) Clean up the old drive. There is no sense in copying temp files, out of date applications or malware to the new drive. After running my anti-virus and anti-malware software and updating my operating system and important applications, I also defragmented the old hard drive.



LH531 Removing Old Drive

2) Back up the old drive. There are several ways to copy the data from the old drive to the new drive, including connecting the new bare drive to the computer through an adapter and running drive cloning software. I chose to instead make an image backup of my old drive to an external USB hard drive, and then later restore to the new drive after swapping them.



LH531 New Drive in Carrier

- 3) Remove the old drive and replace with the new bare drive. This is fairly easy on most laptops, though you do need to take care to avoid damaging the drive and computer from a static discharge.
- 4) Restore the image backup to the new bard drive. With no operating system on the new drive initially, your backup program must be able to be booted from an external drive (a CD, USB or network drive).



LH531 Restoring Image to New Drive

5) Adjust the restored partition(s) on the new drive to take advantage of the additional space, if necessary.

The nice thing about this transfer method is that it is low risk - the original hard drive can always be installed back in the laptop should something go wrong in the transfer process.

I use Acronis True Image backup software, and so used it to make my image backup files for the transfers. Though True Image may be installed on the hard drive, it may also be run from the program CD, as the CD is bootable.

I always run True Image from the bootable CD as I want to be familiar with the way I would need to run it if I ever had a hard drive failure. Though I buy the new version of True Image each year (the latest is True Image 2015), I typically continue to use the older versions on my old computers, as I'm more familiar with the user interface. I found I had to move up to True Image 2014 when restoring to the hybrid drive in my wife's laptop, as the 2011 version I used to make the backup image did not recognize the hybrid drive.

Note that I tried unsuccessfully to use True Image 2015 for the restore; I found this latest version did not recognize the external USB drive containing my backup file. True Image has had extensive and useful support for external and network drives in their previous versions; it appears Acronis may have traded that for cloud storage capabilities in their latest version.

While True Image can back up and restore individual files and folders, its main advantage over other backup programs is in making image backups of drive partitions (the partition data plus the partition formatting). I had True Image create a single backup file containing all the partitions on the old hard drive to make restoring to the blank drive easier.

Once the backup of the original hard drive was created, I flipped my laptop over and opened the small door over the hard drive. To remove the hard drive, I had to lift one end slightly and gently rock that end of the drive while pulling away from the connector, in order to disengage the drive from the laptop connector. The old drive was mounted in a metal carrier, which had to be removed and installed on the new hybrid drive. The procedure was reversed to install the new drive. The only tool needed was a small Phillips screwdriver.

Booting from the True Image 2014 CD, I restored the full disk image I had made from the original drive to the new drive. True Image proportionally increased the sizes of most of the partitions in my image file, so that all the new hard drive's space was allocated among them. I then used another Acronis program, Disk Director 12, to resize some of the partitions to suit my needs.

Before I'd removed the old hard drive, I'd started the laptop repeatedly to measure the boot time. I repeated this with the new hybrid drive, and found that the boot time went from around 90 seconds to around 35 seconds.

The new hybrid drive has much more space and seems to provide a big speed improvement. Only one question remains - should this hybrid drive be defragmented? In a magnetic hard drive, the normal file write and erase operations result over time in files that are not stored in contiguous tracks on the disk, but have portions spread over many parts of the disk (the file is fragmented). In a spinning platter drive, this increases the time required to read the file (the read head must move more and often wait for the data to rotate under the head), so the drive should be defragmented periodically for optimum performance. The same fragmentation occurs in an SSD, but since the read speed is the same for every memory location, the access time is not increased, making defragmentation unnecessary. In fact, an SSD drive should never be defragmented, as this reduces the drive's lifetime unnecessarily (each SSD location supports a fixed number of writes). I'll need to consult with Seagate and Toshiba to determine if SSHDs should be defragmented.

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## **Tools For Mobiles**

## Siri for Seniors (or Anyone)

By Larry McJunkin

FYOU HAVE AN IPHONE 4s or later, iPad with Retina display, iPad mini, or iPod touch (5th generation), meet your new best digital friend - Siri. You've probably been ignoring Siri a lot simply because you may not be comfortable using it. But if you'll just talk to Siri as you would a friend, you'll be amazed how much it will help you during your day. Let's take a look at some of the most helpful things you can do.

Things like sending messages, reading email, placing calls, setting reminders (very important for those of us with short memories) or even finding a restaurant or making dinner reservations. You can ask Siri to show you the



Orion constellation or even how to flip a coin. Siri works hands-free, so you can ask it to show you the best route home and what your ETA is while driving. And it's connected to the world, working with Wikipedia, Yelp, Rotten Tomatoes

(movie reviews), Shazam (song & artist recognition), and many other online services to help you find even more answers. The more you use Siri, the more you'll realize just how great it is. And just how much it can do for you.

#### How to Use Siri

Press and hold the HOME button on your iOS device until you see "What can I help you with?" accompanied by a double-beep tone. Then, in a normal speaking voice tell Siri your command. Wait for Siri to respond to your request and display it. If you're driving, don't try to read it, but reply to Siri again, saying "I can't read it". Then Siri will read back your command for verification, which is very helpful with texts or emails, especially while driving.

Set Reminders, Alarms, Add to Your Calendar & More

- "Set the timer for 10 minutes"
- "Stop the timer"
- "Reset the timer"
- "Pause the timer"
- "What time is it?"
- "What is the date?"

- "Wake me in 30 minutes" (one of my favorites for a power nap)
- "Remind me at 8am tomorrow morning to put out trash"
- "Remind me to record American Idol at 8pm"
- "Remind me to call Jack next Friday"
- "Set up a tee time for next Friday at 9am"
- "Add Yoga to my calendar for next Monday at 10am"

#### Location Based Reminders (Location must be enabled in Settings)

- "Remind me when I arrive home to defrost the turkey"
- "Remind me when I arrive here to buy gas" (use "here" as the "place" at which you want to do something)
- "Remind me when I arrive in Knoxville Tennessee to call Sam"

Read and Send Emails or Texts (Use actual "First Last" names from your Contacts)

- "Read my emails" (Siri will read aloud the time the email was sent, sender's name and subject)
- "Send an email to James Brown" (Siri will then ask you "what would you like to say to James Brown"?
- "Email Bob and say I cannot play golf this weekend"
- "Send a message to Dave on his mobile and tell him I'll be 10 minutes late"
   (assumes Dave has a mobile phone in his contact)
- "Read my most recent email message"
- "Read my new text messages"
- "Text Brenda See you soon smiley exclamation point"

#### Create Notes

- "Note, the grandkids will be here the last week in July"
- "Create a shopping list note" (substitute any name for your list)
- "Add bread, milk, and salami to the shopping list note"
- "Find the shopping list note" (Siri will display your shopping list note)

Some Other Things You Can Ask/ Tell Siri (Use your imagination for more...Siri will likely know the answer)

- "What movies are playing today at the Regal Cinema in Knoxville?"
- "What is the temperature?"
- "What is the current weather in Kansas City?"
- "What is the forecast for tonight?"
- "Search for Italian recipes that use bowtie pasta"
- "Find a table for four tonight in Dallas Texas"
- "What time does the sun set tonight in Paris tomorrow?"
- "What are names of the band members in Three Dog Night?"
- "Did the Tennessee Vols win last night?" (I sure hope they did!)
- "Are there any Mexican restaurants near me?"
- "Where's a good Indian place around here?" (Siri understand slang and will assume you mean an Indian restaurant)
- "How many cups are in a gallon?"
- "Who starred in the movie Gravity"

#### Special Tip

Here's a really helpful Siri tip you can apply in any way you want, to any contact.

• Tell Siri "Brenda Smith is my wife".

This explains to Siri how people in your contacts are related to you, like your mom, dad, or wife, and it will know who you're referring to the next time you ask Siri to contact someone. Then just tell Siri to "Call my wife".

Siri is nothing more than artificial intelligence, maximized in a way to help you with obtaining answers, finding tips and tricks, locating entertainment, staying organized, staying in touch, keeping up with your favorite sports teams, and much, much more. Experiment by simply asking Siri any question that comes to mind and you'll quickly realize just how helpful it is.

**Larry McJunkin,** The Retired Geek http://retiredgeek.net/2015/06/03/siri-for-seniors-or-anyone/

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## From the Reading Room

### Books About Steve Jobs and Apple Computer

By Jim Scheef

STHE NEW MOVIE, Steve Jobs, rolls out in theaters everywhere, my interest in the Apple story has resumed. This new movie, with a screen-play by Aaron Sorkin–remember The West Wing on TV? (same writer)–promises to be excellent but does not attempt to tell the whole story. If you walk out of the theater wondering what happened before or after those product introductions, here are minireviews of several books that, in whole or in part, cover the Apple story in whole or in part. (sic)

Following Steve's passing in 2011, both Time and Fortune magazines published books from the articles they each published over the years about Steve Jobs and Apple Computer. Both of these books make light and enjoyable reading and actually complement each other.

Fortune: The Legacy of Steve Jobs 1955-2011, A Tribute From the Pages of Fortune Magazine (2011, Fortune Books) includes reprints of seventeen articles from Fortune Magazine plus a timeline of Apple's ups and downs over the years.

Time: Steve Jobs, The Genius Who Changed Our World (2011, Time Books) seems to be content from past articles massaged into tributes, plus four article reprints. Ironically the first page has a picture of an Apple I mounted to a piece of plywood with a keyboard and power. The ironic part is that Steve Jobs had nothing to do with the conception of the device that started Apple Computer. What came to be called the Apple I was designed and built so that Steve Wozniak could impress his friends at the Homebrew Computer Club. The Woz was the self-taught genius designer behind both the Apple I and the Apple II, the product that made Apple Computer a Fortune 500 company. What Steve Jobs brought to the table was the business drive to create the company and insight to know that the Apple II should have a built-in keyboard and a stylish plastic case.

The next two books were reviewed in the December, 2011, issue of DACS.doc so I will not repeat other than to say that both tell important parts of the Steve Jobs story.

Revolution in The Valley, the Insanely Great Story of How the Mac Was Made by Andy Hertzfeld (O'Reilly Media, 2005)

Return to the Little Kingdom, How Apple and Steve Jobs Changed the World by Michael Moritz (The Overlook Press, 1984 & 2009; Prologue and Epilogue 2010)

Just one little note: Michael Moritz was recruited by Steve Jobs to be Apple's official historian. This was during the development of the original Macintosh, so he had exclusive extraordinary access. Of course in typical Steve Jobs fashion, Jobs fired Moritz just before the launch. In the irony typical of such things, that makes *Little Kingdom* a great source.

The last book in this batch is from one of my favorite authors, Steven Levy: Insanely Great, The Life and Times of Macintosh, the Computer That Changed Everything (2000, Penguin Books)

Originally published in 1994 and then updated twice, Levy wrote about Jobs and the Macintosh with the benefit of time. *Insanely Great* covers the development and early evolution of the Mac from the perspective of Levy's own experiences with Jobs plus the usual interviews, and the Apple and the Macintosh community. All this starts with a preview in late 1983 of the original Mac when Levy worked at Harper's, was an estab-

lished writer on technology, and had just completed his seminal book on the computer revolution, *Hackers* (1984). Each re-release of this book includes an afterword with then-new information, like the development of the PowerMac. Levy's books are all highly recommended.

Lately I've started reading Walter Isaacson's book, *Steve Jobs* (2011, Simon and Schuster), which is the "official" authorized biography. It's long, over 600 pages including the index, sources and notes. Look for a review in a couple of months.

Directors' Notes, Cont. from page 3

to confirm who will write Review.

- o Abby Stokes is planned as the speaker for the December general meeting. *Dick to confirm with her.*
- o Tom volunteered to write all general meeting Reviews from December on.

#### Other Business

- The status of renovation of the Resource Center was discussed, including options for floor treatment.
- The name of the new DACS Twitter account was discussed.
- Richard reported on the progress of updates to the DACS brochure.

The meeting was adjourned at 9:30pm.

-Richard Teasdale

## DACS Wins Big at APCUG

Over its first quarter century, Dacs has earned much recognition for its community service and for its publications, often in competition with far larger and better funded user groups.

This year we won big, with a clean sweep of first prize awards in both the newsletter and Website categories. The Website award was especially gratifying, because of the increased focus of user groups to the Internet. Thanks to the inspired collaboration of Webmasters Richard Corzo and Annette van Ommeren (who has been active in organizing APCUG's own Website), DACS has established a world class presence in cyberspace.

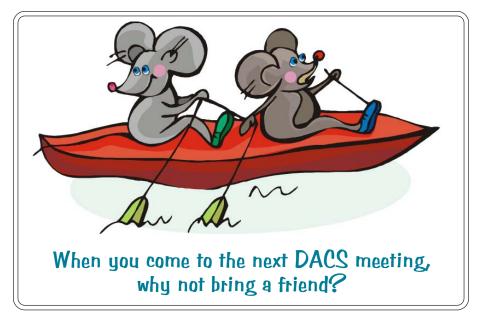


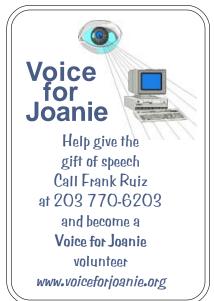
DACS President Dick Gingras accepting newsletter award from from Judy Taylour, contest coordinator.

http://www.dacs.org Nov 2015 • 11

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Danbury Area Computer Society 65 Legion Rd New Milford, CT 06776





# Future Events:

## November 3

Amateur Radio Emergency Service Network

# December 1

**TBA** 

January 5

February 2