"And the Oscar Goes To . . ." - Making a Good Video By Greg Skalka, President, Under the Computer Hood User Group, CA April 2012 issue, Drive Light www.uchug.org president (at) uchug.org

I've discovered it is a lot harder to make a good video than it is to take a good photograph. It is definitely a lot more work.

For the most part, the majority of the effort involved in taking a good photograph occurs before the picture is taken. While some augmentation and enhancement can occur after the exposure, through the marvels of digital photo editing, much of the merit of a photo comes from basics like subject, composition, focus and lighting. While photo editing software can enhance a photo, perhaps making a good picture great, it can only go so far in fixing a poor photograph.

In making a great video, once you have captured the action, your work typically has only begun. In spite of all the star-centric hoopla surrounding the Academy Awards, have you ever noticed that the majority of the awards don't go to performers, but to creators.

There are only a few categories of awards given to actors and actresses. The majority go to writers, directors, film editors, cinematographers and designers of sound, sets, costumes and effects. In a lot of movies made today, most of the work is done after the filming is over. The difference between raw footage and polished final product is much greater for video than for still photography, indicative of the amount of post processing work usually required. As with photography, however, it is still hard to turn poor exposures into a good final product.

I got my first still camera in 3rd grade, taking black and white film photos. In the 40something years since, I learned to take decent photos (at least by my standards) using mostly slide film, where there was no chance for corrections after the exposure. I've had a digital camera for eleven years, but still don't typically edit or enhance my pictures after taking them. I've spent more time making digital corrections on the slides I have digitized, to fix the effects of film aging and imperfections, than on any of my recent digital photos.

Growing up, my family never had a movie camera. A neighbor friend my age got access to their family's old 8 mm movie camera, and he and I made a two-reel epic titled "The History of Aviation". Through careful planning and filming, we came up with a pretty impressive movie for a couple of grade school kids, though we probably destroyed most of our collections of model airplanes in the process (in addition to scorching the underside of his family's metal patio cover during our "reenactment" of the dropping of the atomic bomb on Hiroshima). I'd love to see that film again, if it still exists.

When my wife and I had kids of our own, my in-laws gave us one of the early shouldermounted video cameras (it was so big and heavy, you had to rest it on your shoulder), which recorded directly on VHS tape cartridges.

It recorded some of the early moments in our children's lives, but being analog tape, the results were of mixed quality and could not be edited. We still have some of those 20-year-old tapes around (we should digitize them), but unfortunately I think a few were taped over at some time in the past. Later, we bought a smaller handheld camcorder, which used the smaller VHS-C tapes and was more convenient to take on family outings. These too would not be editable unless digitized.

My very first digital camera had a primitive video capture capability of 320 x 240 with no audio, which was about half the 704 x 480 equivalent resolution of the camcorder NTSC video, but was much more convenient to carry. It still resulted in only video snippets of our lives being captured. Even after graduating in 2007 to a new digital camera with 640 x 480 video and sound, I only shot occasional video clips, and never tried to find a way to edit and combine them into a coherent video feature.

For my birthday late last year, my wife surprised me with a Panasonic SD40 HD video camcorder. It records HD video (1920 x 1080) in the AVCHD (Advanced Video Coding High Definition) file format. Depending on the card size, it can store hours of video on an internal SDHC memory card.

One of the first things I learned about shooting HD video with this camcorder is that I'm going to need more hard drives. I think I shoot a lot of digital photos, sometimes hundreds per month. Using my 12 Megapixel camera, this averages 5 MB per photo, I'm generating around 0.5 GB of new photos per month (assuming 100 photos), or 6 GB per year. I first used my new camcorder in earnest during family festivities on Christmas Day, and managed to fill up the 8 GB SD card that came with the camcorder that day.

If I hold my filming down to 16 GB of video per month, that means I'll generate nearly 200 GB of video data every year. How am I going to store it all?

The second thing I learned about shooting HD video is that not every computer can easily play it. I normally use my XP laptop PC to copy my still photos from memory cards to hard drive and to view them, so I plugged in the SDHC card from the camcorder. Unfortunately, I could not view the .MTS AVCHD video files with any program on that computer. When I put the SD card in my wife's new Windows 7 laptop, I was able to play the files with Media Player. Score another one for Windows 7.

To make the 45 minute video on computer upgrading that was shown at our meeting last month, I started by shooting 51 video segments, totaling 5.7 GB. These included the introductions and descriptions I gave, the scenes of dis-assembly and modification of the computer, and the screen shots of the computer showing the results. A tripod proved essential in filming the scenes where I was talking, as I had to work with a film crew of only one (me). The camcorder's display can be flipped around to allow the

subject of the video to see how they look onscreen. The tripod was also used in most of the shots where I was working on the computer, since it usually took two hands to do the work. I would set up the tripod and camcorder to give a good view of the hardware, and then start filming. I was not watching what was being filmed, but just made sure my activities stayed within what I understood was the field of view.

One of the filming mistakes I made was in sometimes not allowing enough "lead in" and "lead out" time at the beginning and end of the scenes. Excess footage can be trimmed, but you can't easily make more footage after filming is done.

I started shooting scenes before determining what program I would be using to edit the video, so I was not sure what editing capabilities I could count on. I was not sure the program I would use could add titles, so I printed titles on paper and held them up in front of the camcorder. I later found titles could be added using software, but not with the flexibility of my paper signs.

Although I had a couple of commercial video editing software packages available to install, I decided to initially try the editing software that came with the camcorder, Panasonic's HD Writer LE 1.0. I installed it on my wife's laptop to make sure I'd have enough horsepower to do the video editing quickly.

I found the software would not recognize the raw video files I had copied from the SD memory card to the computer's hard drive. To use the captured video with this program, I had to connect the camcorder to the PC with the provided USB adapter cable and download the files from the camcorder through the program. The program had all the basic features I had seen in other video editing software. It allowed clips to be combined on a timeline, with a number of choices for transitions between scenes. Scenes could be edited for length, and basic titles could be added.

I chose the least flashy transitions and put the video segments together one by one. Because of the brief lead-ins I had shot, I could not add much in the way of additional titles, but fortunately the signs I had filmed worked well. I was concerned that 45 minutes might be too long without a break, so I split the video into two 22 minute segments, allowing an intermission in between.

The program could convert the finished video to several different resolutions on DVD or Blu-Ray discs for playing on home players or computers.

'll try using one of my fancier video editing programs with this camcorder one day, but I found the Panasonic-provided software could turn out a good video.

Since making a coherent video out of the filmed segments I made was not too difficult, I'll probably try to make similar edited videos for all the events I film.