



## Gilbert Gia's Historic Bakersfield and Kern County

### Digital Cameras in Microform-Reader<sup>1</sup> Research

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Some digital cameras have ten or more mega-pixels (10MP), but you can take perfectly acceptable research shots with a 3MP digital camera. However, if you plan to a print an 8-1/2 by 11-in (20 x 25-cm) page, then 3MP won't do the job.

Memory Cards and digital cameras are like human relationships; not all cards work with all cameras. My old Cannon A95 used a card called "compact flash" know as "SD/MMD". A 16MB card was in the box, but it filled too quickly so I replaced it with a 512MB card. The number of shots a card can hold depends not only on the MBs but also on the amount of memory allocated (via the camera's menu) to each shot. I never filled the 512MB card during any library session, but because 2GB cards are now quite reasonably-priced, memory conservation is becoming a non-issue.

Digital Zoom magnifies a section of the microform reader screen. It makes the image appear "bigger" by expanding digital pixels, but a "2X Digital Zoom" loses 50% of the image's detail. Optical Zoom moves physical lenses inside the camera to magnify a section of the microform screen (as would a microscope). "2X Optical Zoom" doesn't denigrate the detail of the magnified area. In my library work I only use the zoom to check a shot after taking it.

Some microform readers project an image from above the user and down onto a horizontal viewing surface. The researcher is thus poorly

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<sup>1</sup> Also called microfilm reader

positioned for successful shooting because there is no "best place" for the camera without casing a shadow on the screen. This problem is partially solved by selecting a camera that has a swing-out LCD viewfinder. That allows better placement of the camera for a better shooting angle. Swing-out LCD is also helpful when shooting TV-like microform readers. But finding a swing-out LCD camera can be challenging: Few manufacturers carry it in their product line. Good results are possible without a swing-out LCD, but having it makes life easier.

Close-Up mode is absolutely essential for microform shooting. Most digital cameras have this feature that allows focused shooting between 3/4-in and 20-inches (2cm to 50cm) from the screen.

Some libraries don't permit flash, however you will not use flash for microform shooting. It spoils your images. All modern digital cameras allow you shut off flash.

A useful site for digital camera reviews is <http://www.dpreview.com>. After you've selected a camera, see <http://www.epinions.com/> and [http://www.photo.net/equipment /where-to-buy](http://www.photo.net/equipment/where-to-buy).

Online camera shops with rock-bottom prices sometimes have lousy ratings for customer service. I bought a Cannon A95 from Beach Camera at <http://www.beachcamera.com/shop/home.asp>. Beach doesn't have the lowest online prices, but they're competitive with most online stores. Beach customers are a satisfied group. I have no information re sites that sell rebuilt cameras. EBay lists many used cameras, but a new camera comes in an unopened box with software, manual, memory card, and USB cord.

The mega-street-stores here couldn't compete with camera prices online, and independent shops here priced the Cannon much higher. Local stores (not corporate giants) pay salespersons and pay state taxes, so the theory is more of the cost of local buying comes back to the community. That kind of buying costs 20% to 25% more than online, but that needs to be balanced against the ease and savings of returning a locally-purchased camera.

I first started shooting with no flash, black & white, two-second delay, night scene, and macro. That produced good images, but I don't

use the delay, B&W, or special scene functions anymore. Equally good results are possible with no flash, macro, and normal scene mode. I depress the shooting button half-way to focus, then depress it the rest of the way. With the flash disabled, your camera automatically selects a slower "shutter speed". You'll have to hold still, but modern digital cameras have excellent anti-wobble technology. The A95 compensated for shaking, but I still had to stay as rock-steady as possible. Also, size matters. Smaller camera fit nicely in your pocket, but mid-size cameras although a bit heavier give a more stable hold. Still, newspaper microform often has poor clarity, and editing your images with PrintShop® or similar programs is a must.

Battery Life. Disposable batteries are expensive but some have exceptionally long-life. Recycling anyone? Most cameras allow use of Nickel Metal Hydride [NiMH] rechargeable batteries, which are not the same thing as NiCD rechargeables. A 1600 milli-amp-hour (mAh) battery should supply 1600 milli-amps for one hour. If your camera needs 100mA, then a 1600 mAh battery will be good for sixteen hours, and a 2300 mAh battery will be good for twenty-three hours. What's for sure is that a 2300 mAh battery will last longer than a 1600 mAh.

Fully charged NiMH batteries are good for about 150 shots, more or less. That's "more or less" because previewing and deleting pictures uses battery life, and big, bright LCDs use up battery. But LCDs draw varying amounts of current depending on the camera, and all cameras have their own unique requirements for current--regardless of a battery's mAh rating.

So bring along extra batteries. An advantage of AA batteries over less common ones is you can readily find them at any convenience store. The Cannon A95 takes four AA batteries. They last a long time. After my A95 quit working after 2,600 shots I replaced it with a Pentax Opito33LF. That camera is simple, functional, and has a swing out LCD, but it takes only two AA batteries, and they don't last.

Wal-Mart has battery charger for under \$20 that'll do four AA NiMHs in a couple of hours, and it includes a converter that plugs into a car's cigarette lighter. The low price is important because I've ruined two of them by inadvertently trying to charge regular alkaline batteries.

Note your bibliographic info on a sticky note and put it on the microform screen. I rename shots in this format: "18870212Boxing.jpg". This shows that the shot is about boxing and that it came from a newspaper dated February 12, 1887. The newspaper's title should be recorded in the image's *Properties* page (Right click on file name, select *Properties*). You could also rename the file "18870202BoxingMornEcho.jpg", thus specifying that the image came from the *Morning Echo*. (In Windows, this dating system allows for instant chronological alphabetizing.)

Newspaper microform images back to the 1800s are now online as searchable information. I suspect that many years will pass before Bakersfield's historic newspapers are similarly digitized. Until that happens, local researchers must archive their own work. Today's professional photographers store their work on external hard drives. Recent innovation in non-mechanical, memory-stick technology indicates it might be the future for image storage. The past shows use that we cannot predict the future: In the distinct past, nitrate-print camera-film spontaneously combusted, and closer to present-day, Polaroid pictures fade to pastels. Long-term digital storage remains at risk; some data that has been stored for only a couple of years is already irretrievable.

As technology improves storage media, we must, in a timely way, convert our archives. I worry about the day that I find the 1979 digital transcription of great grandmother Estefina Apablaza's biography saved in WordStar on a 5-1/4-inch, Radio Shack TRS-80 floppy disc.