

October 2004

# Raleigh Coin Club *Newsletter*

A monthly numismatic publication for the RCC

In This Issue: .....Digital Photography .....

Established in 1954

PO Box 12363, Durham, NC 27709

## Digital Photography -

by Paul Landsberg

I will warn you, this article is **NOT** for photography experts. This article represents the sum of my Neanderthal learnings about digital photography. I frankly don't understand f-stop, aperture, shutter speed, or any of the wonky technical aspects of photography. However, I have taken over 2000 digital photos coins and I am a tremendous experimenter and learner. Truly the phrase "*I have stood on the shoulders of giants*" applies whereby I have taken simple learning from other people and built what I consider some outstanding photography.

Due to publishing costs I will not be printing these images in the newsletter but rather I will provide URLs (free cookie for someone who knows what URL stands for) and I will also bring some to the upcoming coin club meeting.

Note that I truly want this article to be usable so I will actually provide you with a bill of materials and sources to purchase everything I refer to.....

**Thesis: Superb digital photography of coins for less than \$600 total!!**

Required: Computer with USB port

- Nikon 4500 digital camera
- Lightbox
- Clamp lamp
- Light bulbs
- Copy stand
- Image editing software

**The Journey.....** I started my pursuit of taking good coin photos about two and a half years ago. I had been using a scanner with OK results but I often cringed when I compared my pictures with some of the photos put up by high end auction houses. I work in the technology field where amazing technology is commoditized by the Far East at unbelievable rates.

# The Club Business Page

## **The Raleigh Coin Club**

PO Box 12363  
Durham, NC 27709  
<http://www.raleighcoinclub.org>

### **Established 1954**

#### **Club Officers**

President  
Paul Landsberg  
Vice President  
Harry Corrigan  
Secretary  
David Provost  
Treasurer  
Kent Woodson  
Sergeant at Arms  
Thomas Powell

#### **Directors (Term)**

Dot Hendrick (2004)  
David Boitnott (2005)  
???? (2006)

#### **Club Affiliations**

American Numismatic Association  
ANA Member #C079478  
Blue Ridge Numismatic Association  
BRNA Member #C-3383  
Eastern States Numismatic Association  
ESNA Member #0026 (Life)  
North Carolina Numismatic Association  
NCNA Member #C-14 (Life)

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## **September 2004 RCC Minutes**

So we are on a newsletter hot streak and we welcomed 5 new faces to our last meeting. Remember, your President has a memory like a steel trap, albeit empty, when it comes to names so please do introduce yourself again in October (grin).

**Refreshments:** I know I spoke to someone about refreshments but 30 days and 4 thousand air miles later I don't recall who. Please do bring cookies, chips, ice & drinks, the club has plates / napkins / cups.

## **Show and Tell**

I'm sure I will miss some but here goes.....Bob Schreiner brought a NC National bank note, Roger had a 12% clip 1976-D Eisenhower, Richard B had a keel boat nickel and Alex shared a piece of Chinese spade money.

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### President's Message

Hello and welcome to October!! I regret to say that the article cupboard was empty and once again with my last minute editorial maneuvers there will be only one article in this newsletter. I hope you find it of interest.

### Digital Photography cont'd.....

Surely digital photography could be no different. Remember when a DVD player used to cost more than a few hundred dollars? To my dismay I found that while digital camera prices were plunging there was a horrifying array of choices. What would I, a photography illiterate do? Like any savvy creator, I asked people who already do outstanding work.....the coin dealers!!

Although there was some diversity in what dealers used for photography, one camera, the Nikon 995 turned out to be the camera of choice for 3 dealers and it was the recommended camera for a high end photography set up (5K\$). Without going into details I was able to spend \$400 (after multiple rebates, etc.) to buy a camera that Amazon retailed for \$800.

I truly thought I had conquered "photography Everest" simply by purchasing the Nikon 995 that had excellent "macro" (close up) photography capabilities. BZZZZZZZt. The coin images were too dark, the colors were not true. The answer turned out to be

lighting and auto-lighting correction by the camera. By using a high intensity incandescent bulb under a simple Home Depot clamp lamp and setting the Nikon to correct for incandescent color, I was able to take very very nice photos.

My only gripe was that a high intensity bulb caused some fairly sharp shadows around the coin. Surely I could do better. And so I cobbled together a structure where I put a piece of plexiglass across a white plastic box, and indeed, no more shadows. Even more impressive, I was suddenly taking photos where the coin was floating in mid-air. Not bad for a photography illiterate.

I still wasn't 100% satisfied. For some reason the plexiglass wasn't 100% transparent after image processing. I think what happened is very similar to when you look through most glass under bright light. It has some color and the image processing brought that out. In other words, the coin photo itself was stunning but the background wasn't pure white or pure black. One could argue that this was a distraction from the coin itself. I should note that I was not overly pleased with the trueness of color at the same time.

**Lighting!!** In talking with a coin dealer who does take superb photos he mentioned that he uses a "BCA bulb." So I swung by a Wolf Camera and found this bulb for \$7. It is 250 watts and it extremely hot. Actually, the bulb only has

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a 3 hour lifetime but that is a whole lot of coin photos! To my delight, the BCA bulb took me to a whole new level of color fidelity in my photos. However, as you can imagine, 250 watts of light casts some major shadows.

**Image editing software to the rescue!!** Remember, this is a journey so now 2 years after I have started this progression, I start working with a colleague to jointly create an online coin business. He has experimented with a particular image editing software by JASC that allows you to “erase background.”

Hmmm.....fascinated I download the 60 day free trial only to find that the software is absolutely unusable. The terminology is obtuse, the “tutorial” is useless for me, and so forth. Fortunately my colleague was in town one evening and gave me a hands on demonstration. WOW!! By using some basic tools you are able to entirely erase the background from a coin and the drop that “floating image” on any color background you want. Note that ANY black background material you find will not look pure in a photo. What does work is that when you use a black background and erase it, and then drop that “floating image” onto a pure black, the results are stunning!!

You can view these images at:

[vcoins.com/ephesus/store/catalog/e27.jpg](http://vcoins.com/ephesus/store/catalog/e27.jpg)

[vcoins.com/ephesus/store/catalog/e41.jpg](http://vcoins.com/ephesus/store/catalog/e41.jpg)

[vcoins.com/ephesus/store/catalog/e40.jpg](http://vcoins.com/ephesus/store/catalog/e40.jpg)

At this point you would think I would be happy. Well.....almost. What happened is that in order for me to get the floating image, I had to go from a fairly simple Adobe Photo Deluxe (old old version 2.0) few clicks to a more complicated background erasure sequence. Yes, the results were phenomenal but it was taking me more time per coin. I want great results and I want them fast (grin).

**The next (and final ??) step.....** For me to get maximum efficiency I basically needed to find a way to avoid the background erasing step. I knew that the BCA bulb had a “color temperature” of 4800 Kelvin which obviously the Nikon liked. I then found a website that sold a “light box” that created background ambient light under a coin at 5000 Kelvin. Once more the credit card came out and the light box arrived two weeks ago.

It is literally size of a DVD case and puts out what looks like weak fluorescent light. I had very little time to experiment but I was initially disappointed because the BCA bulb dramatically overpowers the light box. Upon further experimentation I found that if I raise the BCA bulb high that results in less intensity at the coin surface and indeed I can take photos with no shadows on a pure white background. Sadly I also took a step backwards because the image now must be lightened and sharpened. So my next and hopefully final step was to purchase two compact

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fluorescent bulbs (23W and 55W). Note that fluorescent wattage is not equivalent to incandescent wattage. These bulbs have not arrived as of Sunday, October 10<sup>th</sup> so you may hear an update at the meeting.

<http://www.vcoins.com/ephesus/storage/catalog> and try e1.jpg through e70.jpg randomly. Not all are used!!

**GOOD LUCK!!**

### **Bill of Materials:**

Nikon 4200 4 megapixel camera \$275  
Search [pricegrabber.com](http://pricegrabber.com)

Copy stand / compact fluorescent bulbs / light box \$150  
<http://store.tabletopstudio-store.com/cophkit.html>

JASC Paint Shop Pro 9.0 \$119  
<http://www.jasc.com>

Swing arm lamp \$10 – Home Depot

You may notice I didn't recommend the latest 8 megapixel or who knows how big now. Why? My 3.3 megapixel camera takes outstanding images. You do **not** need more megapixels, you need the Nikon optics and the macro capability. Recently the immediate successor to the Coolpix 995, the Coolpix 4500 was on sale for \$218 during inventory clearances but that deal is no longer around. I sincerely hope this alternate I suggest works as well, the technical specs seem to say it would.

**See images at:**

Next Meeting  
October 14, 2004  
7:30 PM

Kiwanis Park Club House  
2525 Noble Street  
Raleigh, NC 27608

RCC  
PO Box 12363  
Durham, NC 27709

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