



Photographica Digest

Western Photographic Historical Society

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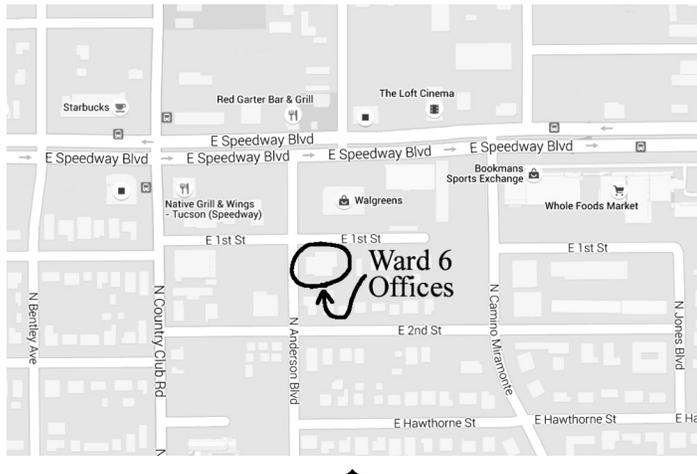
www.wphsociety.org

October 2015

Notice

Meeting Location Change

With the sale of the medical building we were leasing as a meeting place, the WPHS has been forced to find a new location for our monthly meetings. We will now be meeting at the Ward 6 Tucson City Council offices at 3202 E. First Street, Tucson. Meetings will still begin at 7:00 pm. October's meeting will be held on the first Thursday (as usual), Oct. 1st. However, due to scheduling conflicts, our November and December meetings will be moved to the first Tuesdays, Nov. 3rd and Dec. 1st. Hopefully, we can resume first Thursdays as a regular schedule thereafter. The meeting rooms at Council offices are offered to non-profit groups free-of-charge.



WESTERN PHOTOGRAPHIC HISTORICAL SOCIETY

NOTICE OF BOARD MEETING

The Board of Directors 3rd quarter of 2015 meeting will be held on

Saturday, October 24, from Noon to 2PM
at Bookman's Community Room
1930 E. Grant Road,
near intersection of Grant and Campbell

Tales of a Kine Exacta

R. A. Suomala

(Originally published in 2007)

One of the joys of attending the WPHS monthly meetings is being able to see and handle many of the gems brought in for sale by members, the public and WPHS consignment/sale stalwart Gerry Whitaker. It's a smorgasbord of things photographic. Perusing these wares at the November 2007 meeting I spotted an Exacta VXIIa. It brought back memories of my first SLR, an Exacta VX1000, which I purchased new around 1970 for less than \$90 including a very well made leather "never ready" case. The original importer was Ponder and Best (which became Vivitar). Willoughbys (still advertised in 2007 as the oldest camera store in the world, established 1898) evidently obtained them for disposal at reduced prices. There were a plethora of lenses and accessories available for reasonable prices from a NY dealer, Seymour's Exacta.

My Exacta VX1000 was a real bargain and during all the years I owned it had only one failure, an open X sync contact that I repaired using Ed Romney's instructions for disassembly/assembly. It was a great camera but in 1980 when I held the much smaller Olympus OM-1n and listened to its almost silent shutter, my Exacta VX1000 was replaced but not forgotten.

I always regretted disposing of the VX1000 but you can only justify so many cameras when space and funds are limited and you are raising a family. So I just had to have that VXIIa (see Figure 1) even though the lens focusing was extremely stiff (almost completely stuck) and most likely the first shutter curtain would have pin holes from the camera being pointed at the sun with the non-instant return mirror up. One very positive feature was the lens, a Zeiss 50mm, f/2, Pancolar, this being one of the best lenses ever made by Zeiss in Jena. And the price had been marked down! How's that for circular justification?

continued on page 2

continued from page 1



Figure 1

The serial number indicates that this VXIIa is probably version 1 and was most likely made in the period from 1956-57. The prism is a version 6, which was introduced with the VX1000 and was made after

1967. The Pancolar

lens was probably added to the camera sometime later.

Some feel that the Kine Exakta¹ was never a true professional grade camera. But the facts say otherwise. Before the Nikon F came out in 1959, the Kine Exakta was "the" camera used in the medical field for images of surgical procedures and by ophthalmologists to record conditions of the eye. It was the camera of choice for the National Geographic Magazine and a number of university research departments. The Exakta camera system had many options including bellows attachments, a ring flash, slide copiers, microscope adapters and special lighted probes to look into internal organs. The Kine Exakta is the camera Nikon and Canon studied and improved upon. After the Exakta faded from the scene many ophthalmologists, universities and hospitals just went to Topcon Super D's (these used the Exakta lens mount) and the same camera/lens setups were used for many more decades. Actor James Stewart used a Kine Exakta in Alfred Hitchcock's 1954 classic thriller Rear Window.

To assess the light tightness of the first shutter curtain, the back of the camera and the lens were removed. With the shutter fired (mirror up) the camera was placed face down on a cold light head from an old Beseler enlarger (using some black craft paper to mask off the light outside the diameter of the lens mount). Photographing the rear of the first curtain using a Nikon D200 in a semi dark room revealed what might be mistaken for a view of the night sky with lots of stars. But these were not stars but rather pinholes. Fortunately the second curtain had no pinholes because the mirror is always down when the second curtain covers the film frame.

Rather than attempt to replace the curtains, I decided to first try to seal the pinholes. It looked like someone had previously tried and failed. This is considered a no-no by purists but saved me the \$195 it would cost for replacement (which would have included CLA). The shutter speeds are probably off anyway so I will use measured speeds for making exposures.

Having had some success repairing light leaks in bellows with Liquitex acrylic artist color #1045 244, Ivory Black² prompted use of the same material. A few light coats and it really did work. How long it will last is anybody's guess but for now the shutter is useable.

The stiff (aggggh!) lens focusing mount was treated with Break-Free CLP (cleaner, lubricant, preservative), available at most gun shops. The lens was first focused out to its maximum extension and a very, very small amount of CLP was applied to threads that were visible and to the rear of the rotating focusing ring visible. To minimize the possibility of getting the CLP in the wrong places a short piece of #22 AWG solid copper wire was used to apply the CLP one small drop at a time. Avoid getting any CLP on the diaphragm control mechanism. After applying 3-4 drops the focusing control was operated a few times, it smoothed out and worked properly. Applying the CLP at little at a time and checking to see if it begins to work is the best way to approach the job. The idea is to thin the existing grease ever so slightly.

So now the camera was operational. Next step was to check shutter speeds. As might be expected they were consistently slow. But still really quite usable. Up to 1/250 of a second the error averaged about 0.6 stop slow. But above 1/500 of a second the error averaged almost 1.5 stop slow. The curtain travel at 1/1000 second varied by almost 0.7 stop. Really no surprise as even when new this could have been as much as 0.5 stop. Keeping a chart of the measured shutter speeds with the camera will allow correct exposures to be made. The longer shutter speeds (1 sec-12 sec) were all around 0.5 stop slow.

How good is this particular Pancolar lens? A quick test of the central resolution indicates that this is indeed a very sharp lens at that point. One would expect that corner resolution would be less but probably still very good.

Figure 2 below shows the results of the abbreviated resolution test³.

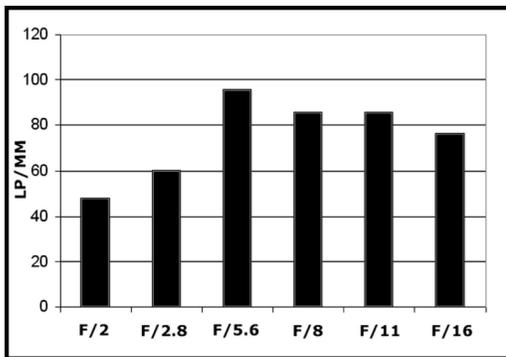


Figure 2

The non-instant return mirror on this camera requires that the lens be capped when the shutter is not ten-

sioned to avoid pinholes caused by the sun's image (which is the best way to store the camera anyway). When the camera is in use, advancing the film (which also cocks the shutter and lowers the mirror) immediately after each exposure is the best way to prevent pinholes.

There are several variations of the focusing control ring on the Pancolar lens. The VX1000 had a ring with milled grooves that worked well. Another version had a leatherette insert in the ring to provide a grip. The lens discussed herein has a plastic insert with teardrop shaped projections on the periphery about every 10 degrees. Unfortunately the inset had become loose and rotated freely without moving the focusing control. The insert material proved to be very brittle and when cut broke into several pieces. The pieces were secured to the focusing ring using Surehold Plastic Surgery (www.surehold.com) which is available in most hardware stores.

OK, so this is not a perfect camera. But it probably works as well as many newer ones and is quite capable of producing excellent images in the right hands.

Notes:

1. The 1933 VP (vest pocket) Exakta was the first miniature SLR camera and used 127 film. Exakta introduced the first: a) lever winder in 1934. b) built-in flash socket, activated by the shutter in 1935. c) SLR for 35mm film in 1936, the Kine Exakta. "Kine" being an allusion to the use of 35mm motion picture film.

2. Available from art supply stores including Sarnoff Artist Materials, 2524 N. Campbell, Tucson, AZ 85719. www.sarnoffart.com.

3. Resolution measured using Kodak T-Max 100 film developed in D76 and a 1951 USAF

Resolution Test Pattern. The Images were evaluated using a 40X microscope. Resolution observed is noted in line pairs per millimeter (LP/MM) resolved.

Links to more Exakta information:

<http://captjack.exaktaphile.com/index.htm>

<http://en.wikipedia.org/wiki/Exakta>

<http://www.exakta.org>

<http://www.exaktaphile.com>

<http://www.wrotniak.net/photo/exakta>

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Western Photographic Historical Society

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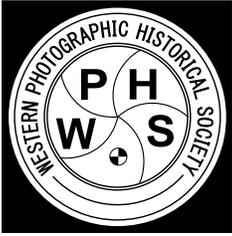
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UPCOMING EVENTS AND EXHIBITS

- Oct 1st Regular monthly meeting at Ward 6 Offices. (Thursday)
Program from our archives.
- Oct 24th WPHS Board of Directors 3rd quarter meeting.
- Nov 3rd Regular monthly meeting at Ward 6 Offices. (Tuesday)
Program to be announced.
- Dec 1st Regular monthly meeting at Ward 6 Offices. (Tuesday)
Program to be announced.
- Mar 20th **2016 WPHS Camera and Photographica Show**,
Hotel Tucson City Center (Inn Suites),
475 N Granada Avenue, Tucson, AZ,
From 9:30 AM to 2 PM.

We'd like your help in developing new programs especially product presentations. Please contact Robert Suomala, Program Chair, at 520-399-2796.

MONTHLY MEETINGS

Next WPHS Meeting October 1st

Join us at a new meeting place, the Ward 6 Tucson City Council offices at 3202 E. First Street, Tucson (see map elsewhere herein).

Consignment and member camera sales, show and tell and a brief program are featured every month (except the last two summer months). The meetings run from 6:00 PM to 9:00 PM with show programs beginning at 7:00 PM.

All are welcome!

**WPHS is a non-profit
501(c)3 organization**