

# Photographica Digest

Western Photographic Historical Society

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President's Zone

R. A. Suomala

Hard to believe it, but I will make it to 2015. Back in 1943 when I first got involved in photography I had no idea that time would go so fast and that technology would come so far.

Now is the time to start planning to attend the WPHS 2015 Camera Show to be held on April 12, 2015. Details can be seen on the second page at www.wphsociety.org. There is a link therein to the reservation form. The space is somewhat limited so get you reservations in soon. A feature of the show will be a demonstration of wet plate photography. If you have not seen this before you will be impressed the skill and fortitude early bv of photographers.

Remember that at the January 1, 2015 meeting, members present will be asked to vote on amending the bylaws by removing the following:

"Board members may serve (2) consecutive (3) year terms. At least one year must lapse before they may be considered for any board position after serving two terms."

## **Thermal Imaging Optics**

Martin Kebschull

Joel Miniturn, the featured speaker at the December meeting, did a presentation on the thermal imaging camera that he uses at work. He is a Mechanical Engineer that does thermal analysis for Raytheon.

The camera, from a company named FLIR, looks like a old school camcorder, (like the ones we can't give away these days).

Only this camcorder is current state of the art and costs \$80k (oh, and there is no video tape involved, it records digitally).

Thermal imaging systems perform two primary functions: imaging and temperature measurement. This is accomplished by measuring the electromagnetic radiation that every object emits (if it is hotter than absolute zero, -273 °C). The amount emitted will depend primarily on the temperature and emissivity of the object.

It senses tiny temperature differences, and the computer processes the information received and displays the range of temperatures it observes in the sensor as a multi-colored image. As such it is very useful to visually observe how hot things are relative to the objects around them.



For instance, Joel can use it to observe circuit card components to quickly tell if they are operating at beyond their specs or if they are not operating at all.

In his demonstration he showed the heat pattern left after Matt's dog got up off the carpet. For the next demonstration, he trained the camera to look at a brushed stainless steel trash can. Reflected off the can, we could see images of people moving around the room. These were images that we could not see without the camera's aid, as the trash can was not reflective in the visible spectrum. This was emphasized when the lights in the room were turned off. No difference in the image was observed (frankly, that floored me)!

A surprising fact, from Joel's presentation, is that what one really pays the big bucks for in these systems is the software. The hardware itself is not really all that state of the art, in fact is probably around 5 years out of date. The lens

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is nothing special other than the highly specialized coatings.

Unfortunately we did not get a chance to see the image projected up on the screen as Joel accidentally brought the wrong laptop and the one he brought did not have the camera imaging software on it. We did however, still got a got flavor from



being able to see the images on the small monitoring screens built into the camera.

So, if I see a camcorder in a donation pile, I will be sure to pay much more attention in the future, so I don't accidentally miss out on one of these systems (you never know what you are going to run across in this club's events)!

By the way, For those folks thinking about the images they coul create with one of these, I think I read that the more commercial versions of these are quite a bit cheaper, I think there's even a version of this that works with an Iphone for around \$300.

## **Argus/Mansfield Skylark**

#### Ron Kuykendall

Collecting Argus can be challenging, not all the A-C series, but all those obscure re-badged imports Argus marketed after Sylvania stripped Argus of its assets in the late 50's. Argus was bought out by Mansfield - the company Argus had started to supply all the accessories for Argus products. The old Argus Company had only the C-33, the C-44, and the C-3 left on the market. The C-33 and C-44 were gone by about 1962. Mansfield re-badged Yamato Pax cameras about the same time-the Yamato M3, the Palmatic (the first electric eye controlled diaphragm), and the Yamato M-4 series were marketed as Mansfield. The Yamato M-4, rebadged the Skylark V, looks a lot like a smaller version of the 1954 Leica M (a design pattern also followed by Petri, Aires, and Nikon among others). They all exhibit a flat front body with some shape approaching hex ends, a compact 24x36 frame, right side lever advance with shutter cocking, super imposed image coupled rangefinder in the viewfinder window with focusing helical at the base of the lens unit. The lens was mounted off center to accommodate the sprocket driving double exposure prevention and frame counting. The Pax M-4 had a Cemenar f1.9 45mm 6 element lens, focusing to 2 ft. The lens was terribly sharp, probably an advancement of the Tessar formula. The unmarked shutter ranged from 1 to 300. This was a far better camera than any Argus product, probably because all Argus designs were rooted in the pre-war Veerschor era. Yamato was adsorbed into Nikon in 1962, and re-badged Balda Mansfield and Mamaya products before selling out the name to Taiwan.

So who, what was this Yamato? Apparently commercial records in Japan before the 60's are few - there was no



government control and most cameras were handmade in small shops on the upper floors of buildings in Tokyo's industrial suburbs. Yamato had some connection with Hagimoto in 1948/50, possibly manufacturing the Hagimoto Dan 35. In 1950 Hagimoto failed and Yamato marketed the Dan as the Pax 35. Yamato acquired the Minon 35 and the Minon 6 (120 6x6) in a similar relationship. Yamato also is credited with the Rapid Shutter on the Gelto and Leotax. By 1958 Yamato marketed the Pax M2, followed by the Leica inspired Pax M3 and Pax M4. In the early 60's, Yamato developed the Artronic Zoon with the first electronic shutter, and the Palmat, the first exposure driven auto diaphragm. The Pax M-4 appeared with several lenses: the Luminor 4 element, the Cimenar 6 element, and the Tominor 6 element f1.9. Tominor lenses had appeared on Polariod and as professional studio lenses. Yamato made lenses for the Yashica Super Yashinon series, IBM copy machines, a line of professional enlarger lenses, and possibly lenses for Aires and Nikon. The Pax M4 appeared as the Wirgin 19E and the Royal 35M. The Mansfield Skylark V I have, has a barely discernible Royal symbol

in the right side leather. Then about 1963 Yamato disappeared into Nikon and the quality of Argus/Mansfield offerings fell considerably.

The Yamato/Royal Skylark V, I have is a small, solid, very capable unknown. The camera in use is competent and convenient. All adjustments at the fingertips, shutter B 1-300, helical focus, the coupled rangefinder is clear and bright. But the best part is the Tominor f1.9 lens – there are threads on the internet where users argue whether the lens is razor sharp, knife sharp or pin sharp. And no one has a complaint about using the camera. Neither do I.

If you have comments, questions or additional information, please contact me at the WPHS website.

### The Mystery of Exposure

Matt Cook

Proper exposure of a sensitive or sensitized receptor in the focal plane of an imaging system turns out to be a very simple concept: the value of the exposure, "E", is the product of the intensity of the light, "I", reflected or emanating from the subject, and of the duration or time, "T", the light is impinging upon the sensor? E=IT. Couldn't be simpler.

In digital photography, exposure, even manually set exposure, is not a problem, in fact, it's not usually a consideration? Half-asecond after you release the shutter the exposed image magically appears on the back of the camera for your approval or adjustment. But with film photography, currently called "Wet" or "Chemical" photography, exposure was theological concept? Totally more like a unapproachable the mysterious and to uninitiated, barely comprehensible to the acolyte or recent convert, an apprehensible sacred mystery to the believer, and a revelation to the true believer, who practices God's Zone System, or otherwise has consistent exposure epiphanies.

As we continue this series to look at photography as it was about half a century ago, through the eye of the Argus C-3, we will now focus our investigation and reminiscences upon a consideration of a practical photographer's approach to the process and practices of exposure control. If there's any one thing that separates film photography from digital, it's exposure control? With film it is the critical decision and action that sets and seals the fate of the entire photograph at the instant of its birth; with digital it's just something that happens.

In the next article, we will look at a bit of the history of photographic exposure control from the perspective of the photographer out in the field.



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#### UPCOMING EVENTS AND EXHIBITS

- Jan 1<sup>st</sup> WPHS Annual Meeting. Members will vote on proposed bylaw amendment. Members are encouraged to bring their favorite images of equipment to share with us.
- Jan 24<sup>th</sup> 2015 Quarterly WPHS Board Meeting at Bookman's on Grant Road from Noon to 2 PM.
- Feb 5<sup>th</sup> 2015 WPHS Monthly Meeting. To be announced.
- Apr  $12^{th}\ \ 2015$  WPHS Camera Show.

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

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

#### **MONTHLY MEETINGS**

#### Next WPHS Meeting January 1st

Join us on the first Thursday of every month at the Pima County Medical Society Building located at 5199 E. Farness Drive, Tucson. Take Grant to Rosemont (turn South), then turn East on Farness Drive to 5199 on the left.

Consignment and member camera sales, show and tell and a brief lecture are featured every month meetings run from 6:00 PM to 9:00 PM.

All are welcome!

The WPHS is now accepting Consignment or Donations for our upcoming April 12, 2015 Camera Show.

> Please contact Imre de Pozsgay 775-287-9538 idepozsgay@hotmail.com