

The Don Krehbiel Archive



Writings • Gallery • Messages • Website



MINOX HISTORICAL SOCIETY

Submini-L:
The Subminiature Photography Mailing List

Don Krehbiel: A Major Voice in the World of Minox

Collected Writings, 1990s–2000s

Don Krehbiel was one of the most respected contributors to the subminiature photography community. As a frequent and thoughtful writer on the Submini-L mailing list and elsewhere, Don's articles on Minox cameras and small-format photography were clear, insightful, and often ahead of their time.

This collection brings together a selection of his writings, originally published online and preserved by members of the Minox community. His work helped shape the understanding and appreciation of Minox cameras for a generation of collectors, users, and historians.

The SubClub, one of the earliest subminiature photography websites, captured his impact well:

"Don was the author of many informative and well-written articles about subminiature photography. His efforts brought together a wide community of Minox users and collectors."

These writings are preserved here with gratitude — not only for what they teach, but for the voice they represent: curious, generous, and deeply committed to the craft.

Compiled and edited by Larry Feldman, listowner of Submini-L

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Writings*



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* pages originally appeared on Minoxlab.com



The terms “large”, “medium”, “miniature” and “ultra-miniature” when applied to camera formats, tend to divert attention from the fact that each is an imaging device with its own virtues and liabilities.

Just as an 8 x 10 view camera may not be the best choice for a yacht race, a Minox is not the ideal choice for Yosemite murals. The Minox, however, is unique in that it does provide the best assurance that you will get a quality image in either situation. It may be the only camera which can *always* be carried, provide “photo album” prints equal to any, and, at the same time, make negatives for near “gallery quality” prints.

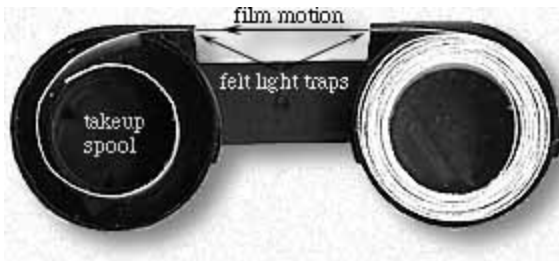
But, to just use it as a small, handy 35mm camera is to miss the real —

Charm of the MINOX

- about USING your MINOX
- about the 8x11mm negative size
- about Image Management
- about Depth of Field and Diffraction
- about Lens Focal Length
- about Film Speed (ASA, ISO, DIN, EV etc.)
- about Exposure and Shutter Speed
- about Flash GUIDE NUMBER

Loading the MINOX

Today's automatic cameras are marvels of engineering and do nearly everything for you, at a cost. The 8x11mm Minox cameras are also marvels of craftsmanship, ingenuity, and convenience, BUT also at a cost. The cost is minimal, but important. You must load and unload the film according to a proper procedure!



The cassette, shown without the covers and with white paper for film, shows the film being pulled from the supply chamber at the right and wound onto the take-up spool at the left. The Minox has an ingenious mechanism which maintains equal spacing between the frames, even though the film on the take-up spool is increasing in diameter, requiring less and less rotation of the drum with each film advance.

For the camera to know the rotation needed for the "next" frame, it must be told when a new roll has been loaded. You must provide this information by ALWAYS loading a new cassette in accordance with the instructions in the owners manual. The frame counter (examples shown below) has a "Loading Mark" in the form of a red **DOT** (or red **BAR**), and **MUST** be so positioned before inserting a new roll of film.

PLEASE NOTE that the new Minocolor PRO film for Minox 8x11mm is packaged in 30 exposure cassettes (a new length), with special counter setting instructions, for each camera style, included with each cassette.

Minox Riga, III, IIIs and B



- Frame counters start at zero and end at 50 (50 exposure film was discontinued in the late 60's).
- Counter indicates the number of EXPOSED frames.
- You must remember the length (exposure count) of the film you have loaded.
- After the last exposure, open and close the camera only twice (see below). Remove the film, THEN advance the counter to the **DOT** in preparation for a new roll of film.

Minox C, BL, LX/TLX and EC



- Frame counters start at 36 and DESCEND to zero.
- Counter indicates the number of frames REMAINING to be exposed.
- 36 exposure film loads must be inserted with the counter set at the red **DOT!**
- Exposing the nominal number of frames should bring the counter to zero.



15 exposure film loads -

- must be inserted with the counter set at the red **BAR!**

If you use less than the nominal number of frames, be sure to advance the frame counter to the **CORRECT POSITION** before loading a new cassette.



Knowing when to START. The "leader" of the film strip is, of course, exposed during manufacture, as is the area between the chambers (with the crescent shaped notch). Closing the camera after inserting the cassette advances the film, BUT not enough to guarantee an unexposed "first" frame. To insure an undamaged first image, **YOU MUST OPERATE THE WINDING MECHANISM ONE MORE TIME**, to get the counter to the zero mark.

The film example shown is AgfaPan APX 25 which was inserted into, and removed from, the camera in very low light. Had it been fast film and subjected to bright light, some leakage through the felt light trap would have damaged the clear area rendering an important image, if placed there, useless.

Knowing when to STOP. It is no accident that the **DOT** is two frames AFTER the end of the film for which your model was designed (36 or 50 exposure). Advancing through two frames at the end of your roll ensures that the last image will be safely protected within the take-up chamber before exposing the cassette to light. It also positions the mechanism for the insertion of a new roll of film, without operating the winding mechanism through a full count to get back to the load point.

The much more dangerous prospect is that advancing the film too far, continuing until the tail of the film is drawn into the take-up chamber, leaving the light trap empty and less effective than designed. Always leave film extending between the chambers to maintain the integrity of the takeup chamber light trap!

So, load film at the "load point" and stop at the proper "end point".

A Hug and a Squeeze

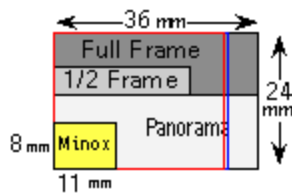
All of the fine engineering and precision manufacture will be for naught if you move the camera during exposure.

The assumption that fast shutter speeds will negate camera movement has merit, but for the increased enlargements needed with the very small negatives, less movement is better. The Minox is perfectly designed for steady operation. If you love your Minox, remember to give it "a hug and a squeeze." Hug the camera TO something, your forehead, cheek, Minox tripod against your chest, wall, table, anything solid. If you are using your body to support the camera, lean against something if possible.

Once you are hugging your Minox, learn to squeeze it with equal pressure on both sides to depress the shutter release. If you allow the edge of your finger to spread onto, and depress, the release, you can increase the pressure in a gradual and steady manner, ultimately releasing the shutter without moving the camera. This need not be a slow process, just smooth and steady. Practice will pay rich dividends. Practice will also reveal the problem of "the finger in front of the lens". We have all done this and lost important images because of it. Rolf Kasemeier, in his book small minox, BIG PICTURES, suggests practicing in front of a mirror. Good advice!

Negative Format (Size and Shape)

Enlargement in this discussion refers to linear enlargement. An 8" x 10" print from a 4" x 5" negative is described as "2x". Admittedly it has four times the area, four times the silver content, four times the pixel count, AND four times the area NOT covered by silver. Arguments can rage between the usefulness of linear vs areal measurement of enlargement, but as a photographer, not a physicist, and since linear measurement is the basis for "lines per inch", "pixels per inch" and "dots per inch", I will use "linear" measurement to describe enlargement.



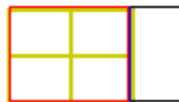
To produce an 8"x10" print, the image of the 35mm negative must be enlarged 8.467 times, while the image of the Minox negative requires an enlargement factor of 25.4. Thus, to produce the same size prints, the enlargement factor for a Minox negative must be 3 times as great as that needed with a 35mm negative.



The **Advanced Photo System** image format is approximately 2/3 the size of the 35mm format. Thus, to produce the same size 8:10 ratio prints, the enlargement factor for a Minox negative must be only twice as great as that needed with an APS negative.



Advances in film technology, designed to produce APS results comparable with that of the 35mm format, will mean better film for Minox



The red outline represents the effect of cropping to the "classic" 4x5 ratio. The blue line represents the shape of an 11x14 inch print. The Minox negative shape closely approximates these two formats resulting in minimum data loss.

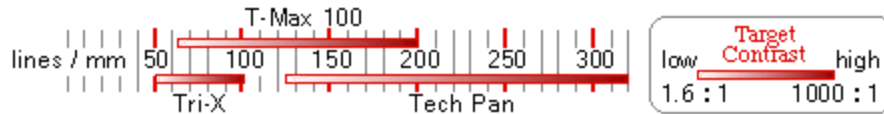
Ranging from the square 1:1, through 4:5, 35mm, and the "Golden Section", to panoramic, the aspect ratio of the final image has a significant impact on the degree of enlargement required. Higher aspect ratios favor the 35mm, APS, and panorama formats, while lower ratios favor "medium format" square negatives. Since each image has its own "best" shape, which rarely matches the shape of the negative, comparisons of one format with another are risky.

The following table shows various formats with the enlargement factor necessary to produce 3.5 inch high prints. Some loss of data in the final print is always present when producing standardized print sizes.

	Negative Ratio	Negative Size (mm)	Print Size (inches)		Enlargement factor
			Theoretical	Delivered	
35 mm	2 : 3	24 x 36	3.5 x 5.3	3.5 x 5	3.70
35mm Panoramic	1 : 3	12 x 36	3.5 x 10.5	3.5 x 10	7.41
APS Classic	2 : 3	16.7 x 25.1	3.5 x 5.3	3.5 x 5	5.32
APS HDTV	9 : 16	16.7 x 30.2	3.5 x 6.2	3.5 x 6	5.32
APS Panoramic	1 : 3	10.1 x 30.2	3.5 x 10.5	3.5 x 10	8.83
Minox	8 : 11	8 x 11	3.5 x 4.8	3.5 x 5	11.11

The resolving power and grain pattern of a film combine with the quality of the optics to establish the maximum capability of the total system. Comparing resolving power of three prominent Kodak products for which technical data is available, it is apparent that film selection has a significant influence on image quality. It is important to note the difference between resolving power with low contrast and high contrast subjects. For low contrast subjects the difference between Tri-X and Tech Pan is 75 lines per millimeter, seemingly minimal, until you notice that the high contrast value for Tri-X is lower than the low contrast value for Tech Pan, and that the ratio is 2.5 : 1. It should also be noted that these are linear measurements and the quality of the image is influenced by the "information density" which is a function of the area, and beyond the scope of this discussion.

These values are for properly exposed negatives, over and under exposure significantly affecting the results. There is a lesson here somewhere.



Prints of pictorial scenes made from Kodak Technical Pan negatives show greater sharpness and detail than those from other films. Prints of pictorial scenes made from the discontinued Kodak High Contrast Copy Film negatives show greater sharpness and detail than those from Kodak Technical Pan negatives. It appears that the Minox can still benefit from future film improvements.

Caveat : Resolution is NOT the only characteristic of importance when evaluating the utility of a film/developer combination. To be sure it is a factor in film selection for very small negatives from which sharp prints are desired. The response to light AND to color (even for black and white), as well as the slope and shape of the characteristic curve, greatly affect the image quality and to some degree dictate the type of subject.

Image Management

Exploiting the "Minox Personality"

Simplify. It is a small camera, with a small negative, so don't try to capture everything in one image! Emphasize form and light, fine detail and subtle tonality is for large and medium format! Identify a central theme. Find and isolate small images within the bigger picture.

Fill the Frame



As one is often advised with 35mm photography, so to this is good advice with the Minox!

Near - Far



Create a feeling of intimacy, allowing the near features to dominate, while retaining sharpness and clarity in distant objects. The feeling of "presence", easily attainable with the Minox's exceptional depth of field, is one of the most important factors in a successful photograph, and is discussed fully by Ansel Adams in his Basic Photo One series Camera and Lens.

Light - Dark



Esthetics aside, film records greater resolution, and we perceive greater sharpness, with higher contrast subjects. The subtle tonal values, so inviting in prints from large format negatives, are lost with the greater enlargement of very small negatives. Worse yet, the granularity associated

with greater enlargement is overwhelming in the middle gray tones. Light and dark tones tend to mask grain patterns because of less clumping in the former and fusion in the latter.

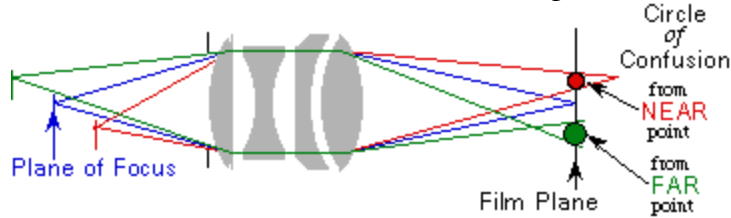
Large - Small



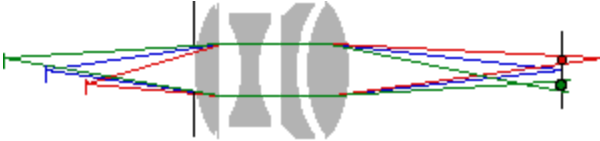
This is an esthetic value and lends scale to the image. When combined with the near-far and light-dark elements, the results can be most gratifying. With the small Minox negative, a large center of interest can be an asset.

Depth of Field

The New Leica Manual , Morgan & Lester, 1951, states that the average eye, at a viewing distance of 10 inches, can distinguish individual lines when they are no less than about 1/100 inch apart.. Thus, in the final print viewed from a distance of 10 inches, "any detail 1/100 inch in size or smaller will be acceptably sharp." This observation forms the basis for the calculation of most depth of field tables.

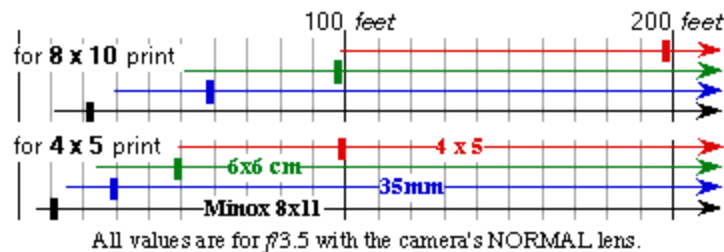


BUT! A lens focuses at precisely ONE distance. Everything on either side of that distance is out of focus, PERIOD! Points more distant than the plane of focus are resolved as points in front of the film, becoming fuzzy circles by the time they reach the film. Points closer to the camera would be resolved as points behind the film, so they are also fuzzy circles when they reach the film. These fuzzy circles are called CIRCLES OF CONFUSION. Unless various degrees of sharpness are used intentionally as part of the image, it is the task of the photographer to make the print appear as if the lens is focused over a wide range from near to far, to make the circles of confusion as small as possible. This "depth of field" can to some degree be controlled.



If the size of the opening is reduced, narrowing the light passage, the size of the CIRCLES OF CONFUSION are reduced **on the negative**. Enlarging the negative enlarges the circles of confusion, hence even smaller apertures are required as the enlargement factor increases. Remember we are striving for 1/100th inch **on the print**!

The table below shows the focal length of a "normal" lens for each of five formats. The f/stop settings shown produce equivalent depths of field. Thus, f/64 with a 324mm lens, and f/3.5 with a Minox, yield the same depth of field! "*Group f/64*", made famous by Ansel Adams, Edward Weston, et.al. derived it's name from the need for a very small apertures to achieve sharp images with 8 x 10 cameras. Perhaps we should have a "*Group f/3.5*".



Note that doubling the print size also doubles the hyperfocal distance and the point of nearest sharpness.

If the above cameras were all set at f/3.5, the following diagram illustrates the depth-of-field (range of adequate sharpness) when including infinity, and the point at which the camera needs to be focused to achieve this depth-of-field (hyperfocal distance)

Depth of field scales engraved on lenses assume some chosen enlargement factor, for example an 8 x 10 print viewed from 10 inches for 35mm cameras, and 4x5 prints for a Minox. It is assumed that larger prints will be viewed from greater distances

f_{stop}	Blue light 400 nm		Red light 700 nm	
	$1/mm$	Max x	$1/mm$	Max x
2	1250	318	714	181
2.8	884	225	505	128
3.5	722	183	412	105
4	625	159	357	91
5.6	442	112	253	64
8	313	79	179	45
11	221	56	126	32
16	156	40	89	23
22	110	28	63	16
32	78	20	45	11
45	55	14	32	8
64	39	10	22	6

The following tables can be used to assess the depth of field for critical work in which the potential print size is to be greater than the nominal 4 x 5 range for which the depth of field scale on the Minox is calibrated. They are also theoretical in that they ignore the effects of [diffraction](#).

Print Size	4x5	8x10	11x14	16x20
Enlargement	12.7x	25.4x	34.9x	50.8x
hyperfocal dist.	10.5'	21.1'	28.7'	42.2'
	5.3' - inf	10.6' - inf	14.4' - inf	21.1' - inf
f/3.5	8" - 7.6" - 8.5"	7.8" - 8.2"	7.8" - 8.2"	7.9" - 8.1"
MINOX	10" - 9.3" - 10.8"	9.6" - 10.4"	9.7" - 10.3"	9.8" - 10.2"
(Thru LX)	1' - 11.0" - 13.2"	11.5" - 12.6"	11.6" - 12.4"	11.7" - 12.3"
	18" - 15.8" - 20.9"	16.8" - 19.3"	17.1" - 19.0"	17.4" - 18.6"
15mm	2' - 20.3" - 29.4"	22.0" - 26.4"	22.5" - 25.8"	22.9" - 25.2"
Focal length	3' - 28.1" - 50.0"	31.6" - 41.9"	32.6" - 40.1"	33.6" - 38.7"
	6' - 46.0" - 14'	56.2" - 8'	5.0' - 7.6'	63.1" - 7.0'
	12' - 91.9" - 28'	91.9" - 28'	8.5' - 20.6'	9.4' - 16.7'
	24' - 13.1' - 145'	13.1' - 145'	13.1' - 145'	15.3' - 56'
MINOX EC				
f/5.7	6.5'	3.3' - inf	4.4' - 13.0'	4.8' - 10.3'
15mm				5.2' - 8.7'

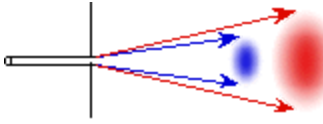
The Minox EC shares the 15mm lens with its siblings. The lens is stopped down to f/5.6 to increase the depth of field. Focus adjustment is not available. With these design characteristics, the hyperfocal distance, for a 4" x 5" print, is 1.989 meters (6.53 feet). If the lens is permanently focused at 2 meters, the EC table shows the depth of field (range of acceptable sharpness) for the various print sizes.

	EC $f/5.6$ Max. $x = 22$	LX $f/3.5$ Max. $x = 36$	
Enlargement 28x Print 8.8" x 12.6"	4.6' - 12'	12' - inf	The EC and LX complement each other almost precisely for prints in the 9 x 12 range. The depth of field figures indicate that with one of each, no focusing would be necessary from 4.6 feet.
Enlargement 21x Print 6.6" x 9.4"	4.1' - 16'	9' - inf	My favorite print size provides a 4 to 16 foot range for the EC and 9 feet to infinity for the LX

Diffraction

Limit of Sharpness

A conflicting optical phenomenon is the tendency of light to diffract. (*change in direction and intensity of a group of waves after passing by an obstacle or through an aperture*) . This phenomenon can be witnessed in a stream where ripples deform as they bend around a protruding rock.



The amount of diffraction is dependent on the wavelength, thus varies over the visible spectrum from blue (400 nanometers) to red (700 nanometers). Smaller apertures, and higher frequencies (toward red) increase diffraction and actually decrease resolution and limit the degree of enlargement.

A point of light, composed of various wave-lengths, and greatly magnified, will appear as a circle (Airy disc). Discussions of sharpness or definition generally accept that a circle of 1/200 inch is perceived as "sharp" when viewed from "reading distance".

f stop	Blue light 400 nm		Red light 700 nm	
	l/mm	Max x	l/mm	Max x
2	1250	318	714	181
2.8	884	225	505	128
3.5	722	183	412	105
4	625	159	357	91
5.6	442	112	253	64
8	313	79	179	45
11	221	56	126	32
16	156	40	89	23
22	110	28	63	16
32	78	20	45	11
45	55	14	32	8
64	39	10	22	6

Leica Manual gives the resolution of a lens as:

"...the spacing between two points just resolved is equal to the wavelength of the light used for the measurement, multiplied by the focal length of the lens divided by the diameter." Since the "focal length divided by the diameter" is equal to the f-stop (f-number) tested, the equation is reduced to **wavelength * f-number**.

So, for f/16 and blue light

400 nanometers (blue light) = (400 / 1000000) 0.0004 millimeters,

and

0.0004 * 16 (the f/stop) = 0.0064 (the spacing between two points just

resolved),

which is (1 / 0.0064) 156.25 lines per millimeter

The table at the left shows the resolving power of a lens and the largest enlargement possible at specified f/stops, for both **BLUE** (400 nanometers) and **RED** light (700 nanometers), while retaining 100 lines/inch on the print.

Note: The table is based on a theoretical calculation of the resolving power of a lens at a specified aperture AND wave length. This is similar to evaluating resolution at maximum contrast, which rarely, if ever, occurs. The values in the table should be at least halved for practical work, and indeed I have seen data to that effect.

Lesson:

Use apertures small enough for the required depth of field, but no smaller!

Lens Focal Length

The "Normal" lens

Using the Leica Manual as a reference, the focal length of a lens is defined as the distance from the principle plane (optical center) of a lens to the film "when the lens is focused on a subject at an infinite distance."

The focal length of a "normal" lens, one which provides approximately the angle of view of the human eye, is equal to the diagonal of the negative. If less than the entire negative is used during printing, the calculations must reflect the new **effective** negative size. The effect can be best seen in the 6X6 cm (Rollei, Hasselblad, etc.) data which reflects the relatively severe (20%) cropping to a 4:5 ratio which leads to a reduction of the effective "normal lens" from 79.9mm to 72.4mm. The result is to shift the standard 75mm Rollei TLR lens from slightly wide-angle to slightly long.

"Normal" lens (mm)				enlargement	% loss	
Minox	8 mm x 11 mm	13.6	15 mm = 10.3%	factor	due to	
35 mm	24 mm x 36 mm	43.3	50 mm = 15.6%	for	cropping	
6x6 cm	57 mm x 57 mm	79.9	75 mm = -6.1%	print size	to 4x5	
4x5	102 mm x 127 mm	162.6	160 mm = -1.6%	of	ratio	
<i>after 4x5 cropping</i>				<i>8x10</i>	<i>11x14</i>	
Minox	8 mm x 10 mm	12.8	15 mm = 17.1%	25.4 x	34.9 x	9%
35 mm	24 mm x 30 mm	38.7	50 mm = 29.1%	8.5 x	11.6 x	15%
6x6 cm	45 mm x 57 mm	72.4	75 mm = 3.7%	4.6 x	6.4 x	20%
4x5	102 mm x 127 mm	162.6	160 mm = -1.6%	2.0 x	2.8 x	0%

Ever wonder what ASA, ISO, DIN mean and how they are related?

How about a Weston rating, or Kodak rating, or Scheiner (American or European) rating? There have been many attempts to classify "film speed", even though there is no single way to do so. The objective is to provide the photographer a way to estimate the exposure necessary to achieve the desired negative or transparency. The problem is that film emulsions and developers have widely varying characteristics, making comparison quite complex.

Of all of the various speed rating systems for film, three may still be commonly seen

ASA

(American Standards Association). Most common film speed rating in the U.S. until the conversion to ISO. Only the name has changed.

DIN

(Deutsche Industrie Norm). Based on a logarithmic scale wherein each increase represents 1/3 stop. ISO 800/30 on a recently purchased roll of ISO (ASA) 800 film indicates that the DIN rating is 30. The DIN values are included in table below for comparison with ISO values.

ISO

(International Standards Organization). Most common film speed rating in the U.S. Doubling the value, doubles the film speed. The table below shows the actual computed theoretical values in the scale, while in practice the values are rounded for simplicity.

Col. A	Col. B		
Linear Scale	ISO (ASA) Scale	f Stops	DIN Scale
	2 ^(col. A)	√Col. B	
0	1	1	1
0.33	1.26	1.1	2
0.67	1.59	1.3	3
1	2	1.4	4
1.33	2.52	1.6	5
1.67	3.17	1.8	6
2	4	2	7
2.33	5.04	2.2	8
2.67	6.35	2.5	9
3	8	2.8	10
3.33	10.1	3.2	11
3.67	12.7	3.6	12
4	16	4	13
4.33	20.2	4.5	14
4.67	25.4	5.0	15
5	32	5.7	16
5.33	40.3	6.3	17
5.67	50.8	7.1	18
6	64	8	19
6.33	80.6	9.0	20
6.67	102	10.1	21
7	128	11.3	22
7.33	161	12.7	23
7.67	203	14.3	24
8	256	16	25
8.33	323	18.0	26
8.67	406	20.2	27
9	512	22.6	28
9.33	645	25.4	29
9.67	813	28.5	30
10	1024	32	31
10.33	1290	35.9	32
10.67	1625	40.3	33
11	2048	45.3	34
11.33	2580	50.8	35
11.67	3251	57.0	36
12	4096	64	37

Did you ever wonder where f/5.6, f/6.3, f/8, f/11, etc. came from?

The scale used for f stop settings starts with 1 (focal length = diameter of the opening) and doubles in value as the opening gets smaller, cutting in half the amount of light allowed to the film. The basis for the scale is one in which each element has twice the value of the previous member, i.e., the powers of 2 (1, 2, 4, 8, 16, 32, etc.) as shown in the ASA Scale. The scale is therefore a "geometric" progression and the mid-point and 1/3 points cannot be derived by division.

So how do you calculate intermediate stops and ISO values?

It happens that if a linear scale is established, and intermediate steps inserted therein, these values can be used as exponents for 2. The resulting values produce the geometric scale seen as the ISO Scale. Merely taking the square-root of each of these values produces a scale of f/stops. Tricky process for a non-math type, but the result provides valid intermediate values for ISO calculations and f/stops. A piece of cake for a computer spreadsheet. (I remember doing this sort of thing on a Monroe mechanical calculator, ugh!). Those of you who used early European cameras will recognize f/6.3 which is 1/3 stop smaller than f/5.7 (f/5.6)

Curiosity Question #1.

If

$f/5.6$ is really $f/5.6568$ (square-root of 32), and $f/11$ is $f/11.3137$ (sqrt of 32)..

and if

$f/11.3137$ is rounded to $f/11$,

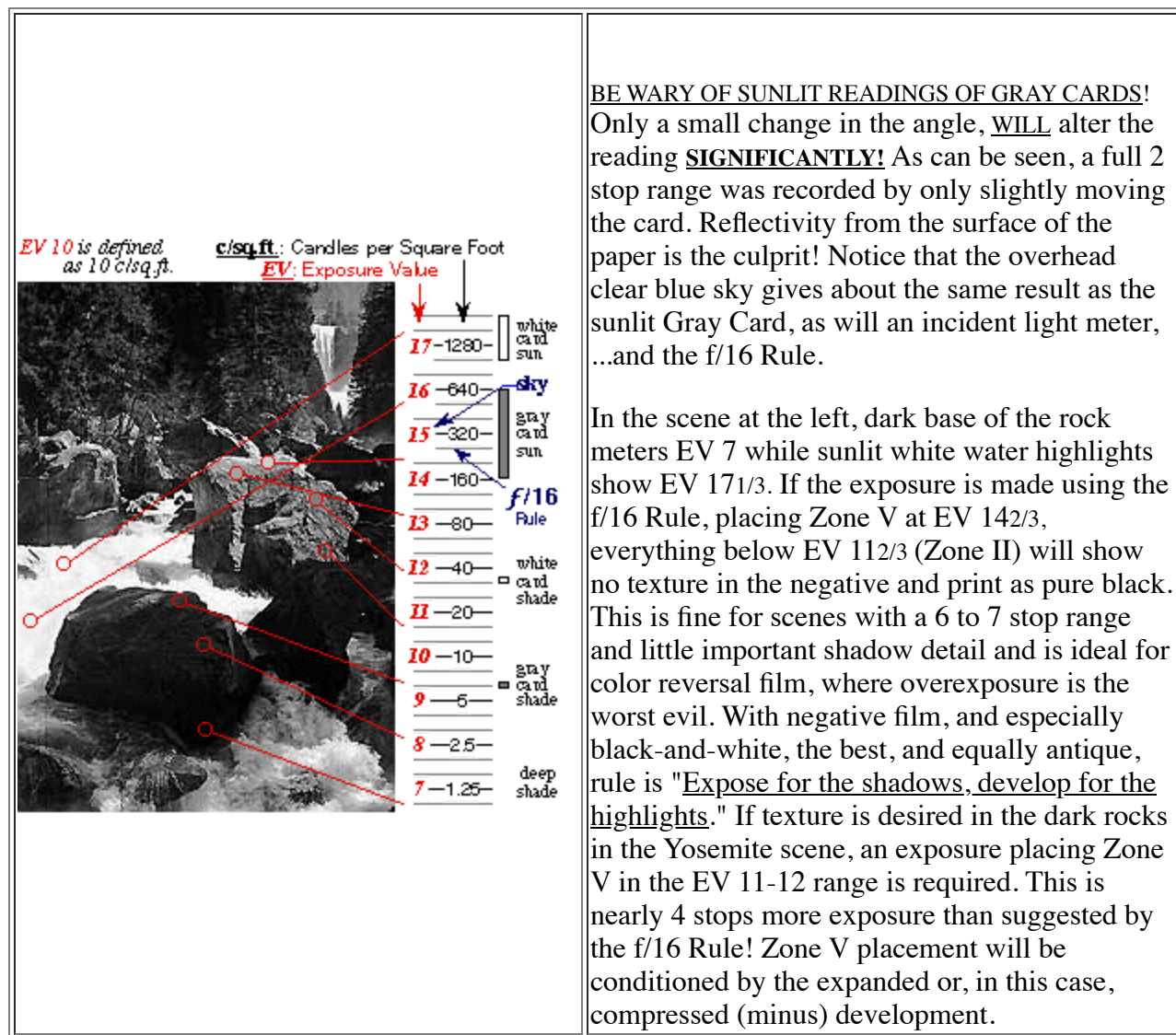
shouldn't $f/5.65$ be rounded to $f/5.7$ instead of $f/5.6$?

AND shouldn't $f/22.6274$ be rounded to $f/23$ instead of $f/22$?

Some thoughts about *Exposure*

Expose for the shadows,

The image below was made, in the late '70s, from the Vernal Falls Bridge in Yosemite National Park, with a Minox IIIs, and AgfaPan 25 film. It represents a "worst case scenario" with a luminance range of ten plus stops. I have returned with both 35mm and 6x6cm formats and been vexed by the conflict between creating enough depth of field (the foreground is not that far away) and stopping the water. This image illustrates the limitations of the f/16 Rule ("In bright sunlight, normal exposure is 1/ISO at f/16").



It does add a whole new challenge in that -

- the high values now are hopefully not beyond the shoulder of the film (as here), and
- control over the appearance of the water is severely limited, and
- exposure AND development become critical, the latter affecting the former.

Some thoughts about 'AUTO' Exposure

Four typical lighting conditions

The exposures below were made with a Minox LX, shutter speed set to "A", and Minox tripod when necessary. It has been my experience that my LX produces the best overall negatives, in automatic exposure mode, when the ASA is set one stop higher than the Zone I film speed, thus the LX is set to ASA 50 for film with a nominal speed of ASA 25.

In a "point and shoot" mode, without serious metering, it is hard to imagine better exposures than those obtained in a variety of situations, some difficult. All shown below were from a single roll, in this case Fuji Super HR film, which I rate at ASA 3, with the LX "fudged" to approximately ASA 6 (see description at bottom of page).

Considering the wide range of luminance conditions, it is amazing that the automatic exposure system of the Minox LX (and C) produces near optimal results in each.



Relatively uniform light distribution with little important shadow detail is a situation in which excellent results are provided by -

- the "f/16 Rule"
- metering a "gray card"
- using an incident light meter, or
- an automatic exposure camera



Extreme luminance range, with exposure influenced by a predominance of one extreme, to the disadvantage of the other. If the camera's meter sees relatively equal amounts of each, neither may be optimally exposed. In this case the ceiling needs more exposure, and the "outside" high values, less. I suspect the high values are too far up on the shoulder of this particular film to provide good local contrast, so giving the ceiling more exposure would only worsen the situation. Lowering the density of the high values with "minus" negative development will lower the overall contrast, producing a muddy effect.

With an automatic exposure camera, slight changes in the position of the camera will significantly affect the overall exposure.



Wide luminance range in very low light situation. A long time exposure which increases the probability of reciprocity failure affecting the contrast. As with the above illustration, the position of the camera has a bearing on what the meter "sees" and is a major factor in the overall density of the negative. This exposure was probably as long as the LX permits, requiring, of course, the Minox tripod. (I carry, in my pocket, three little plastic "shoes" for the Minox tripod, so as not to mar sensitive surfaces.)



Diffused, soft, relatively low level light (EV 4 to 10). The automatic exposure reacted to the dominance of lighter values and underexposed the dark and poorly illuminated beams. Knowing that significant shadow detail was present, and that the camera metering system would react to the dominant white walls, setting the camera for a one stop longer exposure (lower ASA film speed - remember I had intentionally set the film ASA one stop higher) would have provided near perfect exposure for the dark beams, while hopefully not pushing the walls "over the shoulder". Situations like this generally benefit from spot metering and careful exposure calculation, so it is a pleasant surprise to see such good results from an "automatic" exposure.



Although the ASA/DIN dial of the Minox LX shows a speed range between 12 and 400, I have had some success in "fudging" it a bit. My guess is that it can be set below ASA 12 toward the vicinity of ASA 6, and above ASA 400 to the vicinity of ASA 540, which happens to be good for Kodak Ektapress PJM color film. I have found it useful to set the dial in very low light and "Auto" mode where one can experiment and hear the time difference in long exposures. The Minox C does not permit this type of creative exercise.

Flash Guide Numbers

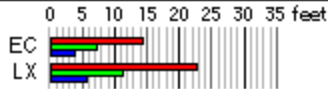
Each flash unit has a "GUIDE NUMBER" which describes the amount of light produced. The question answered by the GUIDE NUMBER is "What aperture (f/stop) must I use to illuminate an object at a specified distance?"

To determine the **f/stop** needed, divide the **GUIDE NUMBER** by the desired **distance**.

- or -

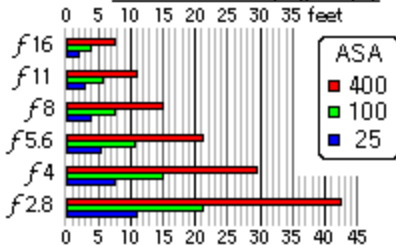
To determine the **distance** that can be illuminated, divide the **GUIDE NUMBER** by the selected **f/stop**.

Flash 8x11 Guide Number 12 (m), 39 (ft)



35 FC-E

35 FC-X Guide Number 18 (m), 59 (ft)



Manufacturers usually specify a GUIDE NUMBER for ISO 100 speed film. Faster film will react to less light, allowing proper exposure at greater distances, thus necessitating a different GUIDE NUMBER for each film speed. As can be seen from the table below, increasing the ISO film speed by a factor of 4 will double the GUIDE NUMBER.

The GUIDE NUMBERS for the Minox flash units at the left are given, in the descriptive material for the meters, for a film speed of ISO 100. The GUIDE NUMBER for film speeds other than those provided in the meter documentation may be computed by a technique like one shown in the table below.

Note in the illustration at the left for the **Flash 8x11**, that a GUIDE NUMBER of 12, when using **meters** as a unit of measure, is equivalent to a GUIDE NUMBER

of 39 when using **feet** as a unit of measure. **Be sure you know upon which units of measure the GUIDE NUMBER is based!**

If the GUIDE NUMBER is known for a specific film speed, a Guide Factor may be calculated by dividing the known GUIDE NUMBER by the square-root of the known film speed (ISO).

This Guide Factor will be the same REGARDLESS of the film speed.

A new GUIDE NUMBER may now be computed for any film speed by multiplying the square-root of the new ISO by the Guide Factor.

ISO	Square Root of ISO	Guide Number	Guide Factor
100	10	39	3.9
400	20	78	3.9
64	8	31.2	3.9
25	5	19.5	3.9

Shutter Speed

While the extended depth of field and normal field of view of the 15mm lens is one of the most frequently cited advantage of the Minox, the additional shutter speed provided by the fixed f/3.5 aperture is certainly an equally important asset.

		asa	25	100	400
Minox 15mm f/3.5	Bright Sun	504	2016	8063	
	Hazy Sun	252	1008	4032	
	Cloudy Bright	126	504	2016	
	Cloudy Dull	63	252	1008	
35mm 43mm f/9.7	Bright Sun	63	252	1008	
	Hazy Sun	31	126	504	
	Cloudy Bright	16	63	252	
	Cloudy Dull	8	31	126	
6x6cm 75mm f/16	Bright Sun	25	100	400	
	Hazy Sun	13	50	200	
	Cloudy Bright	6	25	100	
	Cloudy Dull	3	13	50	

The table at left is based on the age-old "f/16 Rule" which states that a bright daylight exposure can be made at f/16 and a shutter speed of 1 / ASA. Thus, for ASA 25 film, the setting of f/16 and 1/25 second should provide adequate exposure. This frequently provides inadequate shadow detail for black-and-white negatives, and every photographer has personalized it to suit. But, it is a good basis for highlighting the virtue of the Minox f/3.5 lens.

The chart compares three formats, each with a lens of "normal" focal length, and an aperture setting which provides a hyperfocal distance and depth of field equal to that of the others.

The Minox f/3.5 lens provides 4 1/3 stops more light than the f/16 setting, and almost 3 stops more light than f/9.7.

When working with 35mm, and even more with 6x6cm, and "normal" or longer focal length lenses, shutter speed can become a serious consideration, frequently adding a tripod to the equation. It is rarely of concern with the Minox. My personal Minox shutter speed formula is simply to multiply the film speed (ASA) by 10 for normal bright sunlight, which is about one stop more exposure than given by the f/16 Rule. I often carry a spot meter in the woods, but at the airport, pier, or general open country, my "10x" rule works well. This means a normal shutter speed, with Tech Pan (ASA 25), of 1/250 second, which, with "a hug and a squeeze", produces very little blurring on the negative.

-

*A bit about .. **Setting Shutter Speeds***

The electronic cameras, C and LX, do not have intermediate shutter speeds. Only the values on the dial are implemented. If the dial is set between two marked times, the shutter operates at the nearest adjacent speed.

The A (II, III, & IIIs), B, BL, AX provide approximate intermediate speeds. The cam that is attached to the shutter speed dial moves the entire timing mechanism thereby altering the resistance on a segmented gear which controls the speed of the lever with the pins that release the shutter blades. The cam provides a somewhat linear resistance movement which provides the approximate intermediate speeds.

Remember, on the the speed selection dial, distances do NOT represent a linear increase in shutter speed, so when setting the dial half-way between two speeds, the resulting speed will be slightly slower than one might expect.



Actually the spot half-way (50% of the way) between two values on the dial produces a speed increase of only 41%, not 50%, the setting shown will provide a shutter speed of 1/71 second, rather than 1/75.



To get a shutter speed of 1/75 second, you must rotate the dial so that the index mark (black dot) is slightly closer to the 100, approximately 59% of the way from 50 to 100.

This may seem a bit picky, and with shutter speeds probably so, but it is the same phenomenon you experience with the distance dial when focusing, and there you are well advised to be precise!

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The Subminiature Photography Mailing List

The Photographs of Don Krehbiel



The Blue Max



Bradley Gas



Breakfast at Curry



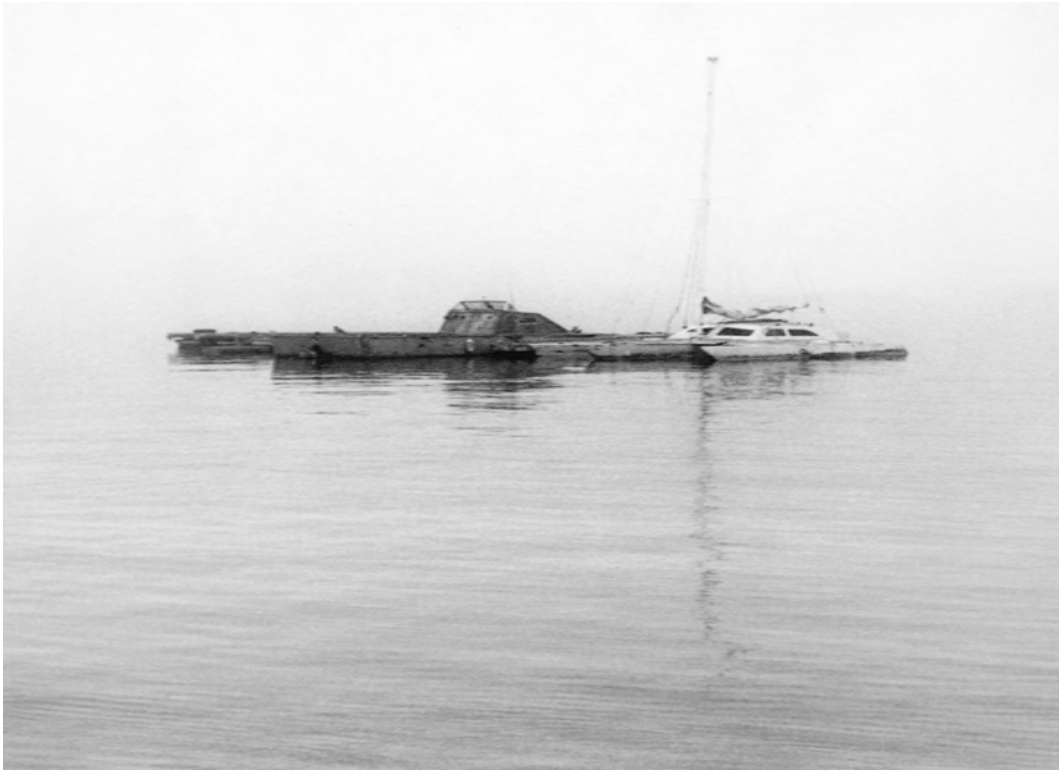
Cannon



Columns



DOR ANN



Fog



For Sale



Just Fishin



Luscombe Silhouette



Primer



Rail



Santa Ynez



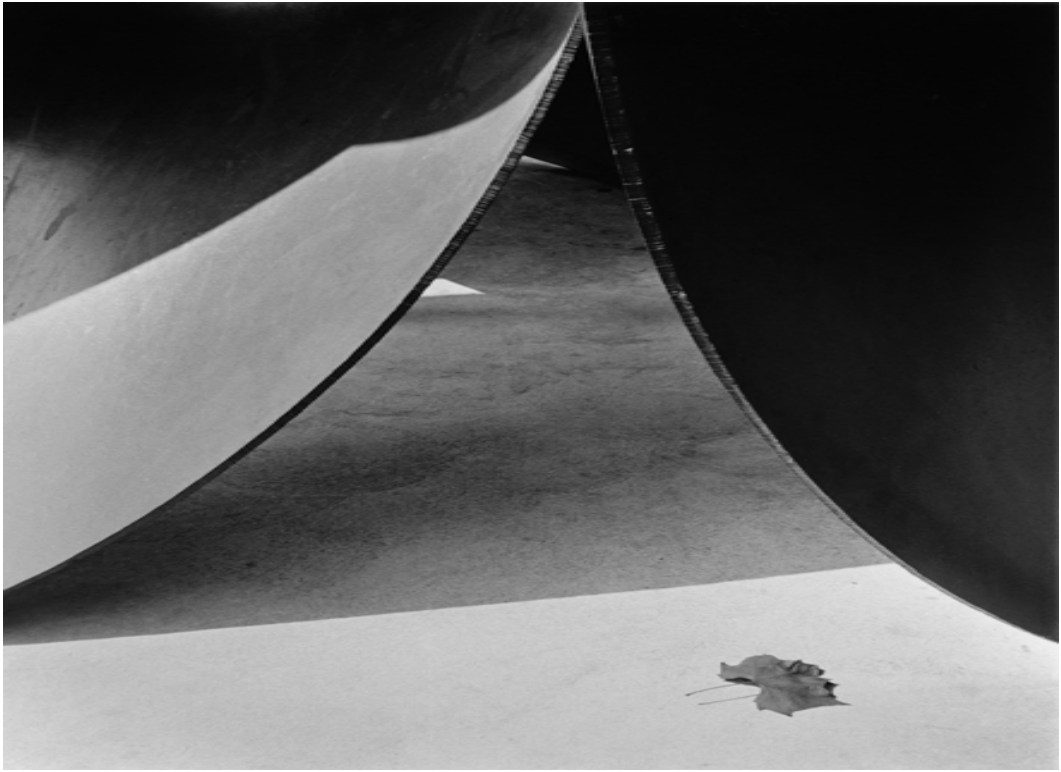
Sebastian



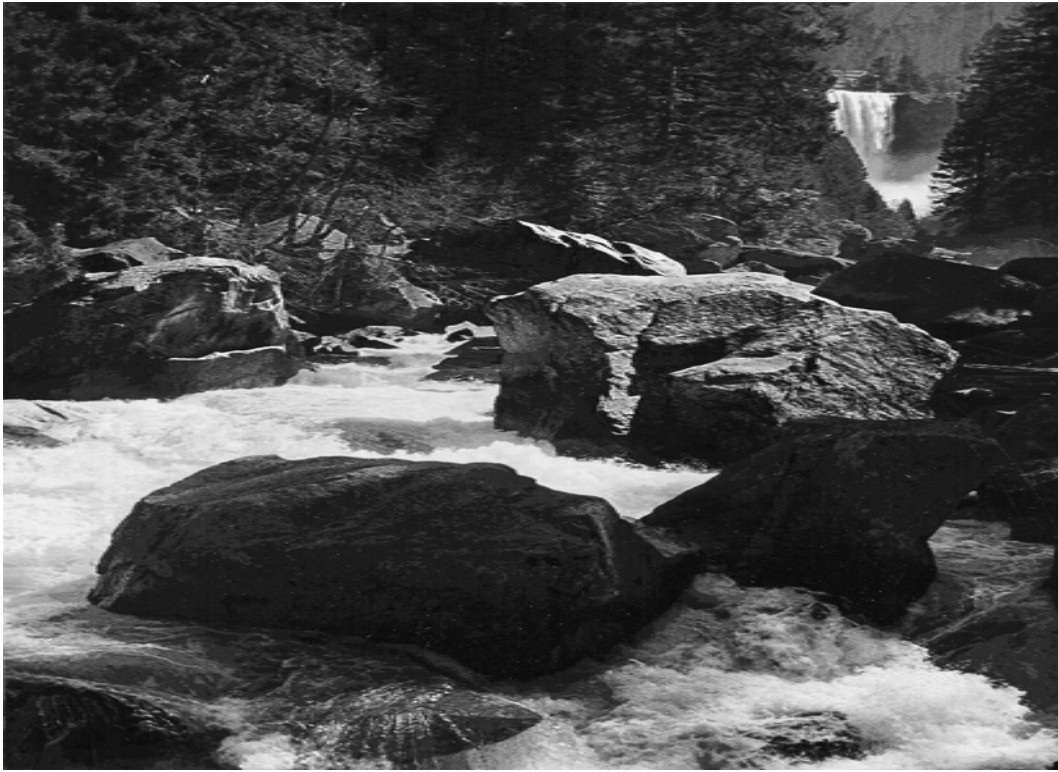
Sentimental Journey



Stearman



Tubes



Vernal Falls



Round

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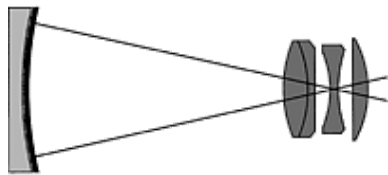
the Camera

Just as an 8 x 10 view camera may not be the best choice for a yacht race, a Minox is not the ideal choice for Yosemite murals. The Minox, however, is unique in that it does provide the best assurance that you will get a quality image in either setting. It may be the only camera which can always be carried, provide "photo album" prints equal to any, and, at the same time, make negatives for fine exhibition quality prints.

The more one understands the Minox camera, the greater must be the admiration for its inventor Walter Zapp. Designed in the mid-thirties, built in significant numbers in Riga, Latvia prior to WW II, the camera has undergone a number of modifications and technological enhancements through the years, but the principles upon which the design rests remain unchanged.

As a consequence of the short focal length and "normal" field of view, the Minox can provide a unique perspective, which is fully developed in an article by [Peter Zimmerman](#).

The remarkable enlargeability of the Minox negative is the result of ingenious design, fine craftsmanship, and modern film technology.



The lens of the 8x11mm Minox has a focal length of 15mm ("normal" would be 13.6mm) so provides the same field of view as a 49mm lens on a 35mm camera. Maximum sharpness was achieved with the early models, even at the fixed f/3.5 aperture, by partially correcting the lens AND by holding the film in a concave film gate. The lens is recessed and protected behind a permanent UV filter, thus has a permanent "lens shade."

Closing the camera



- Opens the film gate & advances the film.
- Advances the film frame counter.
- Locks the shutter release.
- Tension on shutter mechanism is relaxed.
- Resets the built-in filters on early models.

Opening the camera



- Exposes the lens window and viewfinder.
- Closes the film gate, curving the film into place.
- Cocks the shutter.
- Unlocks the shutter release.



Speed of the metal blade shutter, located between the lens and the UV shield, is controlled with a thumb-dial which can be set to any speed between 1/2 and 1/1000 second, (T)ime or (B)ulb. The special shutter blades operate like a focal plane shutter except that the speed is always the same, exposure being determined by the release interval of the second blade. This means that there is never the distortion associated with conventional focal plane shutters operating at high speeds.

On early models the frame counter extended to 50 exposures.

The distance dial allows you to focus from 8 inches to infinity. A curved line is engraved on the camera body to represent the depth of field when the desired distance is aligned with the center dot. Since depth of field depends on the degree

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of enlargement proposed, refer to the discussion of [depth of field](#) for critical work. The engraving on the camera is probably adequate for high quality 5" x 7" prints

The entire viewfinder is linked to the distance dial, moving to align the image seen by the viewfinder to that seen by the lens, providing automatic parallax compensation throughout the focusing range.

In 1970 the "Complan" lens, with the curved film gate shown above, was replaced with the "Minox" lens, and a flat film plane.....[Is there a difference in performance?](#)

IIIIs	15 x 27 x 80mm	1936 - 1969 "Complan" lens	sn 58.500 - 147.494	
B	15 x 28 x 95mm	1958 - 1970 "Complan" lens 1970 - 1972 "Minox" lens	sn 600.001 - 984.328	
C	15 x 28 x 120mm	1969 - 1970 "Complan" lens 1970 - 1978 "Minox" lens	sn 2.300.101 - 2.473.694	
LX series	15 x 28 x 108mm	1978 - Present "Minox" lens	sn 2.500.001 -	

EC and ECX feature

- 15mm, *f*/5.6 lens (stopped down "Minox" lens)
- FIXED FOCUS at 2 Meters
- Automatic Exposure only

EC ECX	15 x 30 x 80mm	1981 - Present	sn 2.700.001 -	
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SHUTTER SPEEDS																			
Mechanical models have continuously variable shutter speeds Electronic models use only the nearest marked shutter speed																			
		T	B	2	5	10	15	20	30	50	60	100	125	200	250	500	1000	Auto	ASA Range *
IIIs	Mechanical	X	X	X	X	X	-	X	-	X	-	X	-	X	-	X	X		
B	Mechanical	X	X	X	X	X	-	X	-	X	-	X	-	X	-	X	X		
C	Electronic						X		X		X		X		X	X	X	X	6- 400
LX series	Electronic								X		X		X		X	X	X	X	12- 400
EC ECX	Electronic															max.		X	25- 400

* for Automatic Exposure operation

Minox Lens'

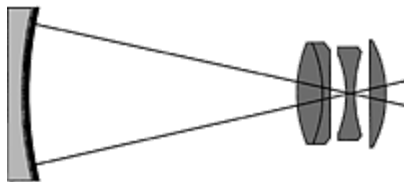
the "Complan" vs the "Minox" Lens

If there is a difference in performance, it is ...

- more a "feeling" than overwhelming visual experience.
- probably not evident in enlargements less than 8x10 inches.
- perhaps only visible in prints made on RC paper (sharper images than fiber paper).
- not demonstrable with film of lesser fineness, (T-Max 100, etc., even AgfaPan 25)
- dependent on a steady camera support in the form of a tripod, sandbag, or youth.
- directly related to critical focus.

The list contains items, such as tripods and very slow films, which largely defeat the purpose for which we love the little gem, and thus are rather irrelevant. So, why do you carry an 8x11mm Minox? If your reason is similar to that of the inventor, the difference between the two lenses is of little interest.

The photographer is responsible for a MUCH greater loss of quality than the camera!



The Complan lens of the early models featured a compromise between lens correction and film curvature to achieve edge to edge sharpness. This is only possible if a film gate presses the film into the exact position needed.

The "Minox" lens abandoned this design in favor of a fully corrected lens and flat film gate.

So, finally, after years of wondering, I loaded a B, "Complan" C, "Minox" C, LX, and just for fun an ECX with Fuji Super HR film, loaded up the Tiltall tripod, and went to the harbor, the hills, and the RxR station. Results from the three locations seem to be well summarized by the sign in this harbor scene.



With the enlarger set to make an 11x14 inch print from a 8x11 mm Minox negative, a portion of the full frame image at the left was printed. The print, which is approximately a 32x enlargement was then scanned using a 600 sample per inch setting.

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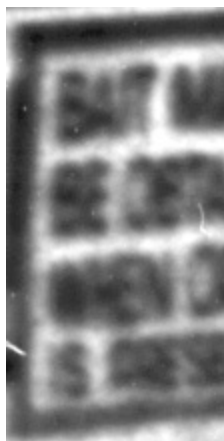
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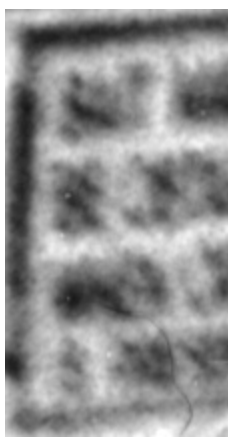
A small sign (outlined in red) was then isolated and shown below without resizing. If your monitor displays 72 pixels per inch, as mine does, the images displayed represent another 8.33 enlargement for a total enlargement factor of 269.

I have tried to match the prints below, for density, as much as possible. You may draw your own conclusions.

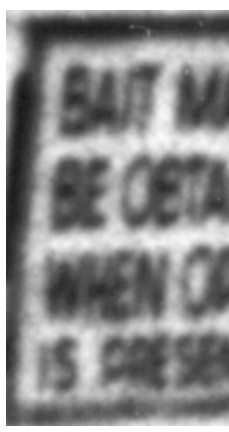
The results provided by the ECX at a distance well beyond its intended range are, to me, remarkable, even more so in view of the fact that the negative quality was degraded by excessive density.



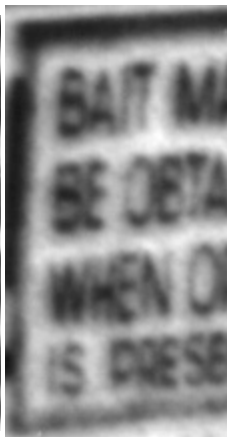
LX
"Minox" Lens



ECX
"Minox" Lens
Fixed focus at 2M
(~6ft.)



B
"Complan" Lens



C
"Complan" Lens



C
"Minox" Lens

Minox Enlargeability

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Enlargeability



It has often been stated that there is no limit to the enlargement factor, since larger prints are viewed from greater distances. Fine, if there is a barrier preventing the viewer from approaching closer than the intended distance, or if the intent is obvious as in photo murals.

When, for the intended viewing conditions, and audience, the print gives a hint of UNINTENDED lack of crispness or granularity, or loses its maximum visual impact, the limit has been exceeded.

Although we like to herald the virtues of the 8x11mm Minox, and it is indeed a magnificent machine, there is an enlargement factor for each negative at which the characteristics of the print will reduce the impact of the image. This break-up is generally signaled by an increase in "fuzziness" or an increased awareness of "granularity" or lack of smoothness. The former is the realm of the camera, the latter, of the film. The perception of these factors is influenced by the viewer's vision and experience.

The contact print (enlargement factor = 1) provides print quality not possible with ANY degree of enlargement. Enlargement introduces image degradation, the degree depending on the AMOUNT of enlargement. So, all other factors being equal, prints made by enlarging various sized negatives TO THE SAME DEGREE, should exhibit the same quality characteristics. It is the AMOUNT of enlargement that counts!

The Minox camera uses a special cartridge with an un-perforated strip of film approximately 9.4mm wide, as shown in the "contact proof" below. The size of the negative image is 8mm x 11mm. The full image shown is approximately a 14 x enlargement with the fishing boat "Kiaora" further enlarged. The fully enlarged boat is therefore a 120 x enlargement which would produce a 38" x 52" full print. This does not imply that I can make a 38" x 52" **silver** print directly from a Minox negative (the grain visible in the 16x20 inch print renders this image unacceptable at that size), only that the

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information to produce the image shown is present in this micro-negative. The 120 x enlargement is 400 pixels wide on your screen, and represents a 1.17mm wide portion of the 11mm negative. It clearly shows the silver grain clumps in the background hillside, the worst case, middle gray haze in a silver print. This image was made with a Minox III and now discontinued Kodak High Contrast Copy Film (5069), a wonderful film with a nice spectral response and very fine grain ... about ASA 6. The camera was hand-held at probably 1/60th of a second. The image demonstrates the spectacular design characteristics, quality, and depth of field of this fine 1950s camera.



The scale below the 120 x enlargement may be used to appraise the resolving power of the camera/film combination. I have no data about the "official" resolving power of either film or camera.

The 14 x enlargement was made directly from a negative scan. The 142 x enlargement was made from a "flatbed" scan of a 16 x 20 inch silver print made with an Omega B-22XL, Nikkor 28mm lens, and diffused light source.

When the 16x20 inch print is scanned at 600 samples per inch, what are thought of as "grain clumps" (actually spaces between grain clumps on the film), are in the range of 8 pixels across.

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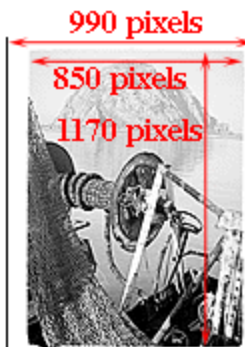
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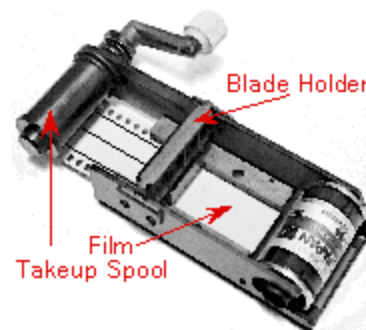
Film for the Minox

Minox film was originally defined as 1/4 the width of 35mm film, 8.75mm, with an image size of 6.5mm x 9mm. When the image size was enlarged to 8mm x 11mm, the film width was increased to 9.4mm (or 9.5mm depending on what you read).

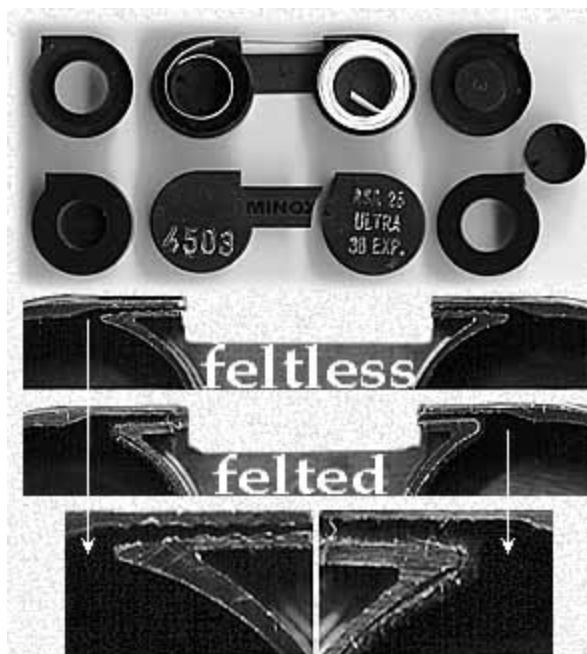


Factory loaded AgfaPan APX 25 was scanned with a Nikon LS-1000 at 2700 ppi. The edges of the film measured 990 pixels, which translates to **9.31mm**. The image size on this film strip measured 850 pixels by 1170 pixels, which is 8x11mm, plus-or-minus a pixel, confirming the relative accuracy of the scan (assuming that the image size is really 8x11mm). There was a slight curl to the film which was not eliminated.

Performing the same test with the Minox Film Slitter yields strips **9.31mm** wide. My Plexiglas slitter yields strips of **9.22mm** and I have had strips of **8.96mm** work with a narrow margin on one side of the image. 8.9mm is probably a theoretical minimum.



... about Film Cassettes



The early Minox cassettes, first metal then plastic, used tape to hold the caps in place, and had a felt-like light-trap in the slots. The cassettes I have date from the '70s and have snap caps which can be opened by carefully pressing the case on the end just below the cap.

ALERT!

All **black** plastic cassettes are **NOT** alike! Although they appear outwardly identical, some have felt light traps and some do not. The opening through which the film passes is much narrower when the felt is not present. If placed on the **felted** cassettes, caps made for the **feltless** cassettes will squeeze the opening, and inhibit the movement of the film. Trust me, you **must** keep the caps with their proper cassettes.

Furthermore, some of my '70s **feltless** cassettes seem to have film passages

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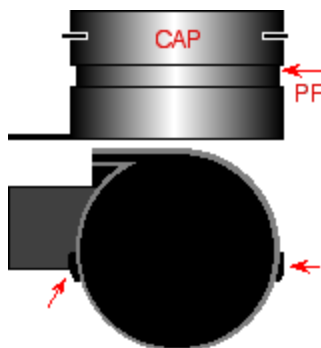
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which have narrowed over time and are nearly closed at the open end (see picture). Although this is less of a problem for the very thin Tech Pan, I have discarded these in favor of the newer **felted** cassettes. Some film types (Fuji 800, Ilford XP2, etc.) are thicker than others (Tech Pan, Kodak Royal Gold 25, Kodak PJM Ektapress, etc.). I prefer the wider mouth of the **felted** cassettes for the thicker film.

CAUTION. Be careful not to overload the cassette. The film **must** move freely in the cassette. I have had good luck with 50 exposure rolls of Tech Pan, and the early loads contained 50 exposures of various films. My suggestion would be that when the film is wound on the 1/4" dowel to load into the supply-side chamber, room is left for the film to "unwind" somewhat when the dowel is removed. Experiment with your film.



ALSO, be sure the takeup spool is the correct size. Take-up spools come in 15-exposure and 36-exposure sizes. They are easy to distinguish, the 36-exposure size has a very thin, sharp edged wall, whereas the 15-exposure spool has an obviously thick wall.



The early metal and plastic cassettes had slip-on caps which were taped for security. Later models provide a snap-on cap which is held in place with 2 small ridges which engage slots in the cap. Gently pressing the cassette body with the thumbnail just below the cap will release the cap, permitting removal

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Film Personality

Personality is Everything!

When you say "I like film X!", or "I don't like film Y!", you are probably reacting to the "personality" of the film and how it behaves in the type of scene you are trying to interpret.

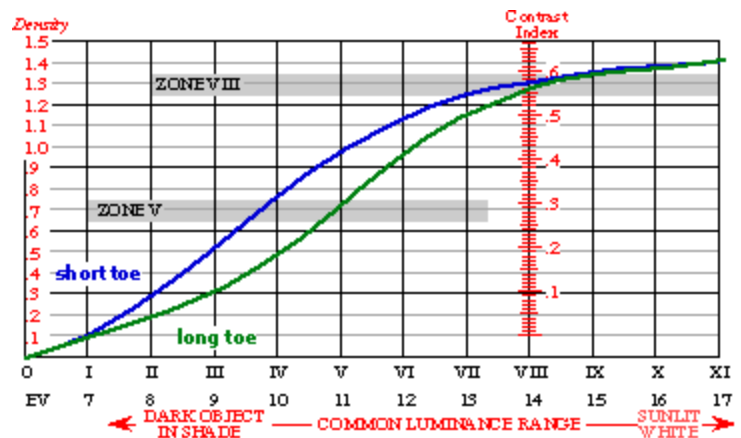
Although the personality of the film may transcend film size and format, the criteria used to select film for medium or large format cameras does differ from those used to select film for a 35mm camera or Minox. Added to the complexity is that the film of choice may not be available in the desired format. When assessing a film's applicability, one must consider the -

- factors affecting the assessment of the film's performance,
- characteristics of the film itself,
- one's own standards and expectations, knowing -
 - **WHAT is to be achieved**,
 - **HOW to achieve it**, and perhaps most important,
 - **WHEN it has been achieved**.

Your negative is rarely if ever seen, so unless the goal is to demonstrate the virtues of specific equipment or methods, neither equipment or method is of interest to the viewer and should never be an excuse for anything but the best result. Each film, modified by the way it reacts to variations in development, possesses a set of characteristics, the sum of which form its personality. The shape of the characteristic curve of a film is, along with the film's speed, granularity, resolving power, and spectral response, fixed by the makeup of the emulsion. Of all of these characteristics, it is the characteristic curve, the film's response to variations in luminance, that is most influential in how the final print will appear.

The illustration shows, two films with the same luminance range, Zone I density or "film speed", and when developed properly, similar Zone VIII densities. But, as the curves show, they react to the intermediate light values in entirely different ways. Short toe films react quickly to differences in low light, essentially building density quickly as the light increases. Long toe films take more energy to activate and show increased density much more gradually. As the graph illustrates, it takes considerably more exposure to reach a given density with a long toe film.

For example, if a density of 0.3 above film base plus fog is needed to provide desired shadow detail, the appropriate scene values may be placed on Zone II with the short toe film, but must be placed on Zone III with the other. In fact, throughout much of the



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midtones range, more exposure is required for the long toe film. BUT, the real difference is in the visual differences in both the negative and the final print. The short toe film records better separation in the low values, while better high value separation is provided by the long toe film. The difference can be dramatic and accounts for many of the expressed preferences for one film over another. In reality, each has a place in the photographer's bag.

Different Films, Different Developers!

I have experimented with a number of films, for use with 120, 35mm, and Minox 8x11mm cameras. Each has a distinct personality, with assets and liabilities. Often the difference is purely subjective and best described by "I like it!", or "I don't like it." The acceptability of a given film is dependent on a number of factors, perhaps the most important of which are the photographers vision and threshold of acceptability.

Remember that these are MY results, with MY equipment, and MY procedures, AND MY EXPECTATIONS. Your results WILL be different.

I generally develop film with either Rodinal or PMK Pyro, each of which produces negatives expressively and physically different from the other. So, with the variables of scene luminance and film selection, as well as choices of developer, dilution, and development time, the possibilities are endless - and that's what makes it FUN!

Several of the films popular in recent years for subminiature photography -

- Kodak Technical Pan Film (replaced High Contrast Copy Film and Solar Flare Patrol Film)
 - Excellent film, available in a variety of formats. My favorite for Minox & 35mm, and for 120 when fine detail is desired.
- Agfa Copex Rapid A.H.U. PET 13 Microfilm
 - FOR ME, produces excellent results with old wood and textures, although 2 stops slower and with more grain than Tech Pan. Not in my current film inventory.
- Fuji HS-U Microfilm
 - Only one stop slower than Tech Pan, excellent sharpness and more uniform spectral balance than Tech Pan. With Rodinal or PMK and MY procedures, displays considerably more grain than Tech Pan. Not in my current film inventory.
- Fuji Super HR Microfilm ("New & Improved")
 - Super fine grain and sharpness. Roughly ASA 3, but provides excellent negatives when exposed at 1/60 second in "f/16 Rule" conditions.

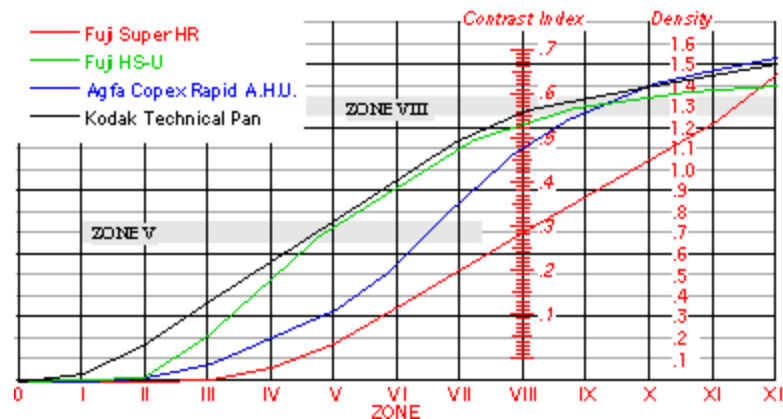
For the chart below, a Minox LX was used to compare the four films. Successive exposures were made providing the required EV values with a Kodak Gray (& white) Card in various positions in shade and sunlight.

Corresponding shutter speeds were chosen to produce Zone values from -3 to XII for a nominal film speed of

ASA 30, as measured with my Pentax Digital Spot Meter. Thus the Zone V Minox exposure was made when the gray card was positioned to give an EV value of 10.5 and the shutter speed set at 1/30 second. The rightmost part of the table is for reference only and is my standard for testing 35mm film in a Nikon FE

The four rolls were identically developed at 20 deg. C., according to my standard Rodinal procedure.

Minox C			35mm		
EV	1/x	Zone	EV	1/x	f/
5.6	250	-3	8	250	8
5.6	125	-2	8	125	8
5.5	60	-1	8	60	8
5.5	30	0	11	250	8
10.6	500	I	11	125	8
10.6	250	II	11	60	8
10.6	125	III	11	250	2.8
10.5	60	IV	11	125	2.8
10.5	30	V	11	60	2.8
16.6	1000	VI	14	250	2.8
16.6	500	VII	14	125	2.8
16.6	250	VIII	14	60	2.8
16.6	125	IX	17	250	2.8
16.5	60	X	17	125	2.8
16.5	30	XI	17	60	2.8
16.5	15	XII	17	30	2.8



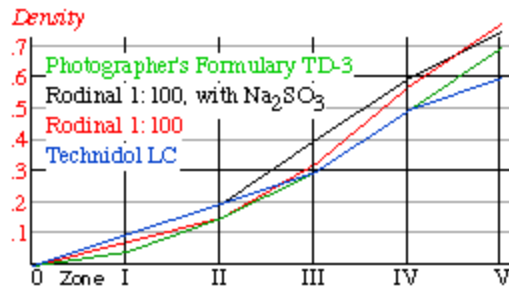
Since my definition of "film speed" (my EI, "Exposure Index") is a density of 0.1 above film base plus fog at Zone I, and since these curves were gathered expecting the film had a speed of ASA 30, a rough estimate of the actual film speed (under MY conditions) can be had by shifting the curve to the left until it contacts the intersection of the Zone I vertical line and the 0.1 density horizontal line. Cutting the film speed in half for each "Zone" the curve is shifted to the left, I have an estimate of MY exposure index.

The table below shows the Exposure Value (personal ASA) values I have established as a result of "film speed" tests to establish a Zone I density of 0.1 above film base plus fog. I find that setting my automatic exposure Minox C at double the "actual" speed provides the best overall exposure in a variety of situations. Your values WILL vary, depending on more factors than I can name, and should be established by you personally.

FILM	Actual "Zone I" EV	"Automatic Camera" ASA Setting
Tech Pan	25	50
Fuji HS-U	12	25
Agfa Copex Rapid	6	12
Fuji Super HR	3	6

The shapes of the curves provide information about what to expect and, in my view, define the "personalities" of the films. Tech Pan and Fuji HS-U, for example, might provide similar densities with scenes having limited shadow detail as at the sea or airport. If the HS-U curve proves to be accurate, the very short toe might have application where low value local contrast is important. Prints from Tech Pan and HS-U have a significantly different appearance due, I suspect, to the extended red sensitivity of Tech Pan.

Although I used Rodinal and sodium sulfite for these comparisons, other developers and/or other development procedures will give different results.



Four rolls of Kodak Tech Pan film, were identically exposed using an ASA (ISO) rating of 25. They were developed in four different developers, using the manufacturers recommendations for TD-3 and Technidol LC, and my personal procedure for Rodinal. The process was not replicated, nor was an attempt made to adjust the procedures to "match" the curves at either Zone V or VIII. The only concern was with the shape of the curve in the area of the toe and how it affected the point at which the curve crossed the 0.1 density line.

The actual film speed may be estimated by judging how far its curve must be moved right or left until it crosses the 0.1 density line. Thus the green curve must be moved to the left approximately 2/3 of a Zone, resulting an ASA 2/3 of a stop slower than ASA 25 (ASA 15.7).

The effect of sodium sulfite on Rodinal is nearly a half stop increase in film speed (defined as requiring a film density of 0.1 above fb+f (film base plus fog) at Zone I), although the densities are similar in the area of Zone V. The difference between the curves at Zones I, II, and III is significant and, depending on the photographer's understanding of the characteristic curve, is the difference between the presence and absence of good shadow detail. Since I have not attempted to adjust development times and agitation routine, limited assumptions about the value of the various developers should be made. Suffice to say that the shape of the curve can have a profound effect on the metering and exposure of low values, and on the amount of shadow detail and local contrast captured.

Which one(s) do I like? All of them! Each has a personality different from the others, providing a choice of "canvas" on which to paint. But, if the combinations of film and developer provide nearly infinite variability, imagine the added opportunities when including the combinations of printing paper and developer!

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General Observations

Film choice is very personal. Each film-developer combination provides a result with a "personality", which can be unique to the person who does the processing. Identical film-developer combinations, in the hands of different people, can produce significantly different results.

You **MUST** devise your own tests with **YOUR** equipment and **YOUR** procedures! ... AND...
EVALUATE YOUR RESULTS AGAINST YOUR STANDARDS!

Extreme enlargements are frequently used to compare film resolution and grain. The result of this series of tests leads me to question that approach in favor of seeking an answer to the question -

"For a given situation, equipment mix, and print quality standard, to what degree can the negative be enlarged before the film itself becomes the critical factor?"

Enlargeability is a function of both **film** and **scene** characteristics.

While I have not been able to produce, at 72ppi, images which accurately illustrate the differences in granularity, resolution, and personality between the films tested, I did discover some of the factors which influenced the results.

Apparent **SHARPNESS** and **RESOLUTION** of detail is influenced by the following:

- Accuracy of focus.
- Accuracy of film registration in the camera - film thickness may be a factor.
- Stability of the camera.
- Nature of the film emulsion.
- Precision of exposure -
 - Overexposure can cause sharp dense edges of the negative to "bleed" into less dense areas.
 - Over and under exposure affect the contrast of the negative, which affects apparent sharpness.
- Grain structure - sharp (and to an extent larger) grain may add "crispness" which is interpreted as image sharpness.
- Scene luminance range - high contrast scenes and objects with great density differentials appear sharper.
- Developer selection, and development procedure.
 - "Edge effects" - reduced agitation can cause developer exhaustion along high contrast edges which can enhance the appearance of sharpness.

Apparent **GRANULARITY** is influenced by the following:

- Nature of the film emulsion - slower film tends to be finer grained.
- Developer - composition and concentration cause significant grain and accutance differences, can dissolve or soften edges of the grain clumps
- Development scheme - agitation scheme and "wet time" can influence grain and accutance.
- Density of the negative - grain is most evident in "middle" gray areas and least noticeable in the low values. The nature of the scene has great influence on the apparent granularity.

IMAGE CHARACTER is influenced by the following:

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- Contrast is inversely related to emulsion speed.
- Luminance range generally increases with emulsion speed.
- Spectral response varies, even with B&W film.
- Image personality is greatly influenced by the shape of the film characteristic curve.
- The effects of reciprocity. Long exposures can significantly increase contrast, providing a powerful tool for influencing image character.

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Building a Slitter

Your design SHOULD differ, reflecting alternatives in both **design** and construction. You may choose to build your own, or purchase one. I use a 16mm to Minox slitter block, described below and made by **Ray Pepalis**, which works perfectly in my base. (Note: Two of the previous references are to the **Sub Club**, one of the most impressive efforts on the internet. Spend some time there!). I have used, with great success, the **Minox Film Slitter** (picture below) which is small, easy to use, and provides excellent results with minimal film loss.

The object of this exercise is to make a film slitter with readily available materials. Slitting and loading one's own film has two advantages

1. The ability to use film types not commercially available.
2. Minimal cost per roll.

Examples at the right reflect 1997 prices and the use of **PMK Pyro** as a developer. The cost of 50 liters of PMK working solution is \$25 plus shipping. Some developers are more expensive, and others less.

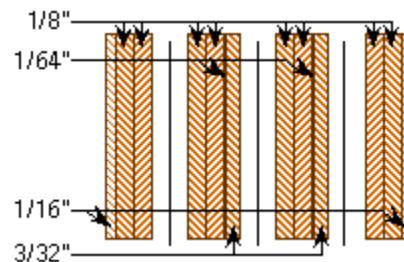
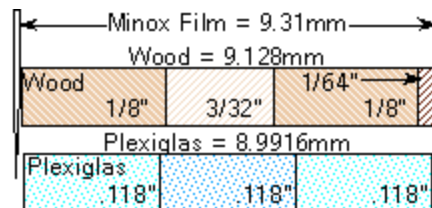
Film	mm	Cost for -	# of rolls	film / roll	Total	
Kodak Tech Pan	35	\$64.30	150 ft.	129	\$ 0.50	\$ 0.65
Kodak SO 150	16	\$9.50	100 ft.	43	\$ 0.22	\$ 0.37
Fuji HS-U	16	\$5.68	100 ft.	43	\$ 0.13	\$ 0.28
Fuji Super HR	16	\$5.19	100 ft.	43	\$ 0.12	\$ 0.27
Agfa Copex AHU	16	\$11.00	100 ft.	43	\$ 0.26	\$ 0.41

Prices are those seen during 1997 and will differ depending on source and date.

For color work, I prefer factory loads of **Minocolor PRO** and **Minox Processing Laboratory** processing.

Minox film was originally defined as 1/4 the width of 35mm film, 8.75mm, with an image size of 6.5mm x 9mm. When the image size was enlarged to 8mm x 11mm, the film width was increased to 9.4mm (or 9.5mm depending on what you read).

In practice, 9.4mm is TOO WIDE for "home" slitting! 9.1mm to 9.3mm is probably the best range. See "Caution" below.



Wood Version. Compared with plastic (Plexiglas, etc.), wood is

- less stable & more subject to humidity changes,
- lighter,

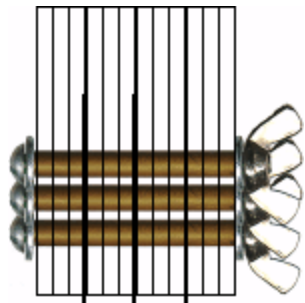
- easier to work, but more difficult to get the correct thickness.

CAUTION! If using un laminated wood, be sure of careful wood type and grain selection to minimize the possibility of warping. My preference is for Plexiglas or laminated wood.

Wood in the dimensions shown should be readily available in U.S. hobby and model shops. In practice, the thickness of the glue and clamping pressure has an influence, and the pieces may be too thick. Thickness should be verified and adjusted.

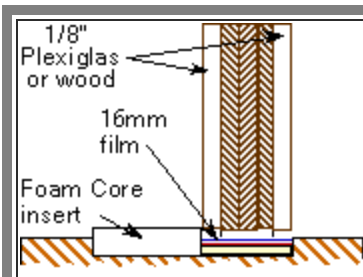
Wood often has a fine "fur" which holds glue and increases the final thickness. I have found it useful to sand the wood lightly with VERY fine sandpaper before gluing. 30 minute epoxy and VERY tight clamping with a bench vise gives me almost exactly the correct thickness.

Using a properly positioned razor blade as a guide, I carefully drill the three holes for the brass tube, bolt, wing-nut system shown below in the Plexiglas version. After using a screw driver for years to hold the round head of the bolt while tightening the wing nut, I was rudely awakened when I received Ray Pepalis' slitter block with a lock washer between the bolt head and the wood (or Plexiglas), permitting "screwdriverless" operation. Thanks Ray!



Plexiglas Version. My original Plexiglas sandwich of four sections of 3 pieces each has worked successfully for me for years. It uses brass tubes, through which pass bolts with wing-nuts. 1/8 inch Plexiglas, from my supplier, has a thickness of 0.118" rather than a full 0.125". Check with your supplier. BE SURE to check the thickness of the Plexiglas (acrylic sheet) you use, ... thickness may vary! Mine would benefit from a couple of Hollerith (IBM) Cards for additional spacing, but better too narrow than too wide!

I use a liquid glue made especially for Plexiglas type material and laminate the three layers prior to drilling and shaping. A friend found a service to mill the proper thickness from a single piece, avoiding the lamination process and assuring the exact dimension.. The shape was the same as shown above for the wood model.

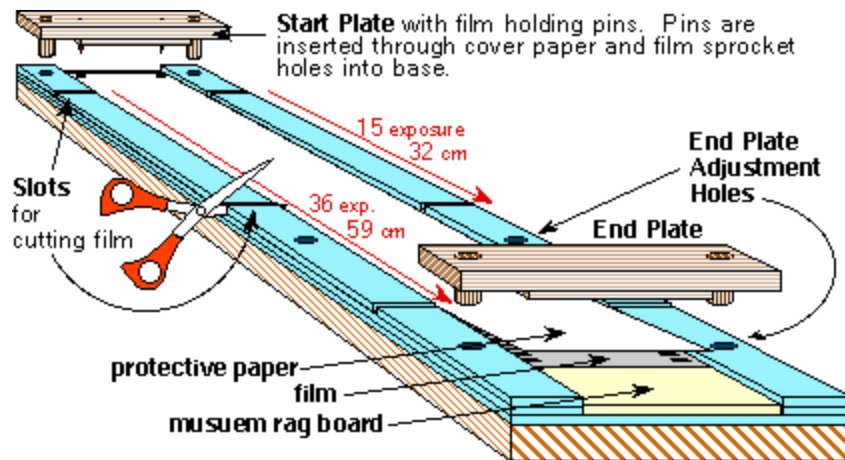


Slitting 16mm film to make 9.3mm Minox loads. Make a Plexiglas (or 1/8" wood) segment for each side of one of the center segments. This will give you a sandwich with 2 blades which approximates the width of the 16mm film. Cut a piece of foam core (or laminate mat board) to fill one side of the trough, leaving 16mm for the film. Cut a 16mm wide piece of museum board for the bottom of the trough.

The razor blades are mounted at an angle so that as the stripper is pushed along the 35mm film, clean cuts are made. The blades should protrude about half the thickness of the museum rag board on which the film is placed (like adjusting a mat-cutter blade). Since the razor blades have four corners, and since blades are cheaper than film, I generally "rotate" the blades to a new corner after 6 to 8 passes. Kodak Tech Pan film which has an Estar-AH base may require more frequent blade changes! BE SURE you have clean cuts

with no ragged or rough edges or debris which provide resistance and/or might foul the camera! The film should easily pull out of the cassette to prevent undo stress on the camera's film advancing mechanism.

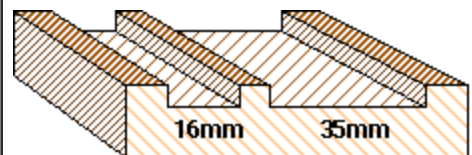
CAUTION! The film, when rolled and inserted into the supply-side chamber of the Minox cassette, **MUST NOT** protrude above the rim of the cassette, rather, it must be just below the rim. Because of curl, it is VERY difficult to judge the width of either a factory-load film strip or yours. To know when your film is the correct width, roll up a factory load, insert it into the supply-side chamber of a cassette, note how far it is below the rim, and make yours the same width ..



My original film holder was made from a scrap piece of board with the side guides built-up with mat board, and small nails over which to hook the film. It lasted 20 years. I have since replaced it with a single piece with the trough routed. I use a piece of museum rag board in the bottom of the trough and place the film, face down, with a 35mm wide strip of adding machine paper over the film to prevent scratches.

The wooden START PLATE and END PLATE are identical except for two nails in the START PLATE which are pressed through the paper and film into pre-drilled holes in the base, and act to hold the film and protective paper during slitting. The END PLATE is used to stop the slitter at the proper film strip length, and should NOT be pressed tightly against the film.

If you are interested in film types which are available only in 16mm width, you may wish to cut a second trough in the film holder base to fit the 16mm film and slitter above, eliminating the need for an insert to narrow the 35mm trough.



<u>Exposures</u>	<u>Film Length</u>	
15	32 cm	12.9"
30	52cm	20.3"
36	59 cm	23.2"
50	77 cm	30.1"

After building the slitter, I made sample cuts using paper only to determine the position of the **End Plate**, and to mark the location of the film strip start and end. Saw cuts were made forming **Slots** the width of a scissor blade.

You will need something to aid in the insertion of film into the supply chamber of the cassette. I have had good success with a simple piece of 1/4 inch dowel with a thin slot cut in the end. I used a jewelers blade for the cut so film just slips in (and out) easily. To aid later in the alignment of the takeup spool and takeup chamber cap, I have wrapped the end with "Artists Tape" to build up the diameter to just slip through the opening in the take-up chamber cap.



Variations and suggestions by Bill Hoy of Bedford County, VA

I used furniture-quality plywood for the base because of its dimensional stability and smooth surface. Instead of milling a 35 mm wide groove (which would have been a mess in plywood), I built up the sides of the groove from storebought, smooth planed oak. Folded newsprint makes a good gasket between the groove pieces and the base. Use a sharp Exacto knife to trim the gasket paper flush.

You should measure the film length precisely before you cut the grooves for the scissors and put countersunk screws on either side of each scissor groove to hold the side pieces in place. Do this BEFORE you cut the scissor grooves, but be careful not to hit a screw with your expensive saw blade!

Instead of using mat board at the base of the 35mm groove, I used a narrow kerf sawblade to mill shallow grooves for the blades to travel in. I put paper above and below the film before I slit it to avoid scratches.

I made my blade holder out of a solid piece of hardwood. I happened to have a fairly long piece of 2 1/2 X 4 1/2 by 2 foot piece of very well aged walnut I had been given. I drilled the holes for the blade holders and the clamping bolts into the end of the piece first, then sliced approximately 9.5 mm pieces ACROSS the grain. This is important because wood swells and contracts with humidity along the long portion of the grain. Very little dimensional change occurs across the grain. I then sanded the thicknesses to film width: sanding, slitting and then loading the film into cassettes. If the camera opened and closed with difficulty, I knew I was still too wide. Back to the sanding block.

Shim Material by Mike Taglieri.

Use junk film rather than cardboard, etc., for shimming the blades. Clorox bleach will take the emulsion of film completely off (put on straight, it strip the emulsion in seconds), leaving you with clear plastic that's very dimensionally stable, and I've often used this for shimstock. With the emulsion on, you have a gelatin layer that can absorb moisture, change thickness, etc. Without emulsion it's just acetate, and you can get different thicknesses of shimstock depending on what film you strip.

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Exposure The virtues of Zone System discipline may seem unavailable when each frame is not to be individually developed. It is, however, possible to preserve a good bit of Zone System rigor with several useful tricks.

When the luminance range for each frame in the roll is within acceptable limits, and highlight tonality can be achieved with normal (N) development, exposure of each frame can be determined on the basis of low value placement by traditional Zone System methods.

In an environment where differences in the luminance range will require abnormal development of select frames within the roll, expose as if selective development WILL be possible and BE SURE to note exposure AND development data, as if single negatives were being made.

When the roll is finished and the range of development (N minus to N plus) can be assessed, develop the roll for the frame requiring the lowest contrast Contrast Index. The key here is to expose AS IF YOU WERE using a view camera - "Expose for the shadows!"

Development For ROLL FILM, the old mandate to "Expose for the shadows. Develop for the highlights." is easily followed for the former, probably impossible for the latter. As a result, post-processing contraction or expansion is the only available option. - I have chosen expansion.

1. Determine the minimum development needed for each film/developer combination, while maintaining optimal printability with various paper/developer combinations. What is the maximum N-minus development.
2. Devise procedures for achieving N-plus results.

◦ Selenium Toning

- Kodak Rapid Selenium Toner not only alters the tone of silver prints but also silver negatives. In the process, the density of silver rich areas of the negative is increased. There is no change where there is no silver, and the appearance of grain is not increased. Sounds like the perfect intensifier.
- As per my original notes, I use 1 part Kodak Rapid Selenium Toner and 2 parts Heico Perma Wash working solution. Ansel Adams, in his book "The Negative", suggests 1:2 or 1:3. Depending on the film, and degree of intensification, I swirl individual frames in a beaker for up to 5 minutes. If the entire roll needs treatment, I use the developing tank and agitate constantly.
- Each film/developer combination will react differently. Tech Pan developed with Rodinal is quite active and CAN achieve N+2 to N+3 results. At the other end of the spectrum, film (including Tech Pan) developed with PMK Pyro shows little to no enhancement.

- Since Kodak Rapid Selenium Toner is a solution of ammonium thiosulfate (same stuff as Kodak Rapid Fixer), you have essentially just re-fixed the film and must go through your wash cycle again. It is interesting that early on, the suggestion was made to mix Kodak Rapid Selenium Toner with Hypo Clearing Agent or PermaWash - now Kodak recommends plain water - and I doubt that it makes any difference. It is simply that after a half-century, I'm too old to change

Digital Negatives for Contact Printing Computer control over imagery provides unlimited opportunities and demanding constraints. Just as traditional photography requires a negative with sufficient information, so too does the digital "file". The quality of the final image is indeed tied to the quality of the source - "There is no free lunch!" BUT, the opportunities are indeed limitless and the introduction of "archival" inks and paper, and the ability to make traditional prints from digital negatives, make this one of the most exciting advances in the history of photography. It certainly adds a new dimension to the use of roll film.

Printing

1. Bleaching

W. Eugene Smith was the absolute master of this, described in detail by Mr. Smith himself in Darkroom. The bleaching effect of potassium ferricyanide is greatly enhanced by the addition of sodium thiosulfate (hypo). The potassium ferricyanide working solution shown above, when used by itself, will work VERY slowly - BUT IT WILL WORK!. If hypo is added to the ferricyanide solution or if hypo is applied to the print, the bleaching action is accelerated. Control over the process is gained by alternately applying bleach, water, and hypo in varying amounts. One can apply several bleach cycles without seeing any change, then immerse the print in hypo, and discover either a thing of beauty, or horror. It all depends on the amount of bleach still in the print emulsion when applying the hypo. It DOES take a while to master the process, but the results can be rewarding.

Stock solution - 75g. potassium ferricyanide, water to make 1 Liter
Working solution - (1:10 dilution) 91ml stock solution, water to make 1 Liter.
Hypo - 240g. sodium thiosulfate, water to make 1 Liter

Dry Bleaching

Ansel Adams, in his book The Print, mentions "clearing the highlights" with a Farmers Reducer solution. When a dried, but not toned, print is immersed in the working solution of potassium ferricyanide, for a limited time (5-30 seconds), the high values are affected first as the solution soaks into the emulsion. The print is then immersed in water to neutralize the bleach, then hypo to finish the bleaching process. Little if any result may be seen during the initial "bleaching" process, the final result depending on how long the print is immersed then rinsed prior to being treated with the hypo. With care, the process can be controlled to effectively increase the overall contrast of the print.

2. Variable Contrast printing paper.

Contrast control can be achieved with variable contrast printing paper in 3 ways. The results of each technique, using the same paper, will be quite different, and the results of any of the three processes with different VC papers will also be quite different.

1. Using filtration of a single color for the entire exposure.
 - The traditional method of exposing variable contrast paper, where varying amounts of yellow or magenta filtration simulate the various grades of printing paper.
2. Using different filtration for the low, and high contrast emulsions.
 - Method where pure yellow filtration is used to find the proper exposure for the highlights, then pure magenta filtration is used to darken the low values.
3. Use of special developers to adjust contrast.

Time honored contrast control - Beers Two-Solution Developer - Dektol & Selectol Soft.

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Where to find **E**quipment, **S**upplies, **S**ervice, **P**rocessing

Although mine is not a commercially oriented site, it is important to give credit where due.

Since introducing the Minox to the U.S. in the 1950s,

[The **Minox Processing Laboratories**](#)

has provided aid and comfort to those of us who cherish these marvelous instruments. Their site documents the complete Minox line and provides access to a full palette of services. They are nice people, for whom the Minox is a passion as well as a business.

For repair, restoration, CLA (clean lubricate, & adjust), and parts

Don Goldberg at [DAG Camera Repair](#)

2128 Vintage Drive
Oregon, WI 53575
(608) 835-3342

...and for Fuji Frontier laser prints on Fuji Crystal Archive Paper, from film, digital cameras, or digital files, visit

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If the ultimate goal of photography is expressive prints, a significant new option, available to achieve that end, is now in place. The notion of exposing photographic media with a laser is providing the most significant improvement in print quality I have seen. Coupling the traditional appearance and permanence of photographic materials with the ultimate creative freedom of digital manipulation, prints can be produced, the quality of which is limited only by the skill of the photographer. ePixel provides exceptional PHOTOGRAPHIC prints from digital files, whether submitted as traditional film, data from a digital camera, or directly from a photo editing program such as Photoshop.

Although Color and B&W printing have historically required distinctly different processes, Grayscale images, submitted as sRGB files, whether "toned" with the "Duotone" option or not, provide lovely "B&W" prints in sizes from 4x6 to 10x15 inches.

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Slitting & Loading Film for the Minox

I generally slit 35mm film from standard or reloadable cassettes, so the unused film remains in the cassette. With bulk 16mm film, I have found it convenient to cut the 100 foot length into the proper, pre-slit, lengths and store them in sealed film cans in a black bag. I then transfer as many pieces as I am prepared to slit into another film can and temporarily place it in a paper safe on the counter. I can then store the slit lengths in another film can in the same paper safe until ready to load into the cassettes. I have one piece of thick foam tape stuck to the top of the "already slit" can and nothing on the "not yet slit" can. Remember you will be in TOTAL darkness during the slitting process, so careful placement of the items listed below will reduce "groping" time.

LIGHTS ON

Clean the work surface of all dust and debris. I run a small desktop negative ion generator from the '70s and \$20 drugstore air purifier for an hour or more prior to beginning.

I then lay out the -

- slitter base with end blocks
- slitter block (assure that the blades are sharp)
- roll of cover paper and scotch tape
- winding dowel
- scissors
- cassettes
- empty film cans for the temporary storage of slit film
- film supply

1. Prepare cassettes

1. Remove caps from both supply and takeup chambers
 2. Place takeup chamber caps and spools aside for later use
 3. Blow out both supply and takeup chambers with compressed air paying particular attention to the felt light traps. Place on table upside down.
 4. Blow out plastic cassette boxes and place on counter upside down.
 5. Arrange the cassette bodies, supply chamber caps, and boxes in a position where you can find them by feel in the dark.
2. Cut a proper length of 35mm (or 16mm) paper, wrap it around the end of the board and tape it to the bottom to hold it firmly against the action of the slitter. The nails in the START PLATE will not hold the paper securely without the paper being wrapped around the end of the board.
 3. Pull out a short length of film from a loaded 35mm cassette (be careful not to expose film that will be slit for use).
 4. Pull the paper back out of the way and lay the film (emulsion side down) in the trough, aligning it with the end of the board so the nails in the START PLATE will penetrate the film or sprocket holes.
 5. Pull the paper back over the film, align and press the paper and film into the trough, securing by pressing the START PLATE, through the paper and film and into the base.

LIGHTS OFF - TOTAL DARKNESS

1. Pull the cassette, smoothing the film FACE DOWN, into the trough.

2. Pull the paper over the film and making sure both are lying flat in the bottom of the trough.
3. Plug the END PLATE into the appropriate holes, loosely holding the film in place.
4. Position the slit with the trailing edge against the START PLATE, pressed firmly into the film.
5. Push continuously and slowly with pressure until it hits the END PLATE.

(16mm NOTE) Since the lights are on when positioning a new piece of paper, and, when slitting 16mm film, only one load is slit for each pass, I find it convenient to precut 16mm film into proper lengths (using the base board as a guide) and store these in an empty, properly sealed, film can. Remember that in order to extend under the START PLATE and end plates, the "blanks" must be longer than the finished length!

After stripping, still in **TOTAL DARKNESS**.

1. Using the film length **Slots** as guides, slip scissors under the film (as shown above) and cut the film ends.

Pete Zimmerman suggests putting the strips in a light-tight can (bulk film can, developing tank, etc.) and returning to the following steps when all of the film is cut. I use bulk film cans and, for added safety, temporarily store them on the counter in a light-tight paper-safe.

- 2.
3. Use the dowel shown in the **building section**, roll-up the film, pulling it through an antistatic cloth.
4. Use the dowel to insert the film into the supply side chamber of the cassette, sliding the end of the film into the light-trap slot, leaving about 1.5 inches protruding from the opening slot.
5. Withdraw the dowel, press the film fully into the chamber, and install the cap.

THIS IS ALL DONE IN COMPLETE DARKNESS, being sure that everything is organized before turning off the light. Chasing the little parts is really fun.

When all of the rolls are safely in their light-tight supply chambers, I TURN ON THE LIGHTS

1. Prepare strips of 1/4 inch wide "White Artist's Tape", approximately 1.5 inches long.
2. I generally pull out a bit less than 1.5 inches of film and attach a bit less than half the tape to the back (non emulsion side) of the film.
3. Attach the take-up spool, carefully aligning it with the film. I have found it unnecessary to wrap the tape entirely around the take up spool to the emulsion side of the film, as is done with factory loads. You may choose to do this.
4. I Slide the film through the "light trap" slot in the take up side, allowing the cup-like spool to settle into the chamber. THIS IS THE MOST LIKELY SPOT TO BREAK THE cassette! (as I have done, see above) - **HINT**: I have found that a small piece of film, temporarily inserted into the "light trap" slot, at an angle, from inside the chamber, will act as a guide for the film being loaded.
5. Holding the cap loosely over the take up chamber, I insert the large end of the dowel through the hole in the take up chamber cap, into the spool, and wiggle it around until the cap settles down over the spool, then press down on the cap to snap it into place.

Although I load my own 35mm film and allow 40 frames in rolls I am going to slit for the Minox, you can get 2 lengths from a 36 exposure commercial roll. That means four 36 exposure Minox loads or eight (if you are careful) 15 exposure loads. Of course, you must

already have cassettes, but they will last forever IF you are careful not to break them.
Minox sells a slitter with which the entire 35mm roll can be slit at once, then cut to length.
This eliminates waste between lengths and gives a little more usable film.

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Final Check

The presence of pure white and pure black can be assessed using the high and low value bands attached to each negative, as described in [Step 4](#),

Each print should be evaluated for exposure, development, and contrast. Variability among prints maybe caused by changes in

1. Paper, chemicals, or processing
2. Intensity or color of light source
3. Effective density of the negative due to fading, or drying

Without the scales attached to each print, subtle deviations from the optimum will go unnoticed. The most troublesome for me are #2 and #3, light intensity being a continuous problem, and the [fading of the negative](#) most noticeable within the first few weeks.

The density scales on each properly made print should exhibit the following characteristics.

Loss of Contrast

Clue: White band has no white, as easily seen against the taped portion, while the low value (black) scale exhibits the expected density. Since the contrast is controlled by both density AND color in the negative, I would be at a loss to know which has caused the loss of "effective density". The most direct fix for this problem is to add a bit of magenta when printing.

Excessive Exposure

Clue: Too much density in both the high AND low value scales. If all of the normal procedures have been followed, this is most likely due to an unstable light source and requires checking with a light probe such as the [Ilford EM10](#).

The Specific Problem of Negative Fading

Since the calibration process is usually carried out with negatives that have just been printed, the "effective density" is provided by "fresh" ink. Does the effective density change as the ink dries? It now appears the answer is YES! Prints made with negatives that are 2 to 3 weeks old, exhibit the tonality shown in the "Loss of Contrast" example above. Black is fine, but white is no longer white, indicating that HUE=0 and a Transfer Function setting of 70 does not provide adequate contrast after the negative has aged.

Rather than change the initial negative color, I have chosen to add magenta to the light source, and add exposure time. This means a bit of print testing at each new session, but perhaps the degradation will slow or stop after the first few days.

Light Source

"Fresh" negative	White
"Aged" negative	~ 30cc Magenta

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Minimizing Grit in a Minox

An oft asked question about self loading relates to scratches on the film. I have not established a cause for said scratches, indeed there are probably a variety of causes. Although many come and go along the length of the film, the scratches I most frequently see run almost the entire length of the film. My current theory is that most scratches are caused by debris OUTSIDE the cassette which becomes lodged in the opening of the takeup side. Support for this theory comes from scratches on "factory loaded" film, coupled with the observation of no increase in scratching with my self loaded film. Although careless loading of cassettes will introduce debris into the supply side of the cassette, I suspect that a majority of scratches are NOT the result of the film slitting and loading process. I am now exceedingly careful when loading the camera, and avoid loading in the field whenever possible. I feel strongly that Joel's suggestion below has, for me, reduced the problem significantly.

Minimizing Dust by Joel Moskowitz

Joel suggests a technique he adapted to the Minox from a cinematography class. "Using an ear syringe, I hold the camera upside down (gate open) and blow out the film compartment thoroughly. Upside down because the syringe only has to dislodge the dust and gravity removes it from the camera. Any stronger gust of air might drive the dust further in. After blowing out the camera, I immediately (still with the camera upside down) insert the new cassette, keeping it clear of any dust from the camera."

I surely do not wish to minimize the necessity of rigor in the darkroom, and run a small negative ion generator and "drugstore" air purifier in the darkroom for a couple of hours before slitting and loading. I also pull the film through an anti-static film brush or a "Dust Magnet" antistatic dust cloth while rolling it on the dowel for insertion into the supply chamber. I did, for years, use phonograph record "velour" cleaning pads, so there are a variety of methods for trapping the potentially damaging grit.

I will be happy to post here (with proper credit) any other suggestions which might help fellow Minox aficionados to minimize the impact of debris on their precious images. Just send a note.

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Step 1

Find Minimum Exposure Needed to Print Pure BLACK

IMPORTANT!

Before beginning the calibration process, test the silver print development time to assure maximum black without lowering the high values. I use Ansel Adams "Factorial" system described in his book "[The Print](#)". I have found that since I can control the local low value contrast by reshaping the curve (see Step 3), I can now develop the print longer without blocking the low values. I am now developing 50% longer than formerly, achieving a richer black. Experimentation with print development time, AND developer, needs to be included in the calibration tests.

AND REMEMBER, these are MY results. Yours **WILL** be different! Sometimes I think even the phase of the moon has an effect.

Finding the exposure and development for PERFECT BLACK can be as simple as making a test print of a blank strip of negative material placed on a sheet of the photographic printing paper to be used.

Since black is printed for areas of the negative that have no ink, this test can proceed before any others.

When the lighter area, exposed through the negative material just disappears, the proper exposure and development have been found to insure that the areas of your image with a Photoshop value of zero will print as the MAXIMUM BLACK of which the paper and developer are capable.

In this example, the 7th step is full black. Additional tests might find an intermediate exposure between the 6th and 7th step which first produces black. One should also verify that additional development will not darken the test area.

Whereas with photographic film, the "film base plus fog" can vary from roll to roll and film to film, this is not the case if you use the same material for all of your negatives. The exposure and development values established here will remain valid as long as the same materials are used throughout.

The procedure above will assure PERFECT BLACK, but makes no guarantees for the critical shades between 90% and 100% black. To assure that a Photoshop value of 5 (98% black) can be clearly distinguished from PERFECT BLACK, a test chart will be of value. The chart shown below will be used to establish the contrast which provides PERFECT WHITE, and will help here to prevent excessive exposure and/or development when searching for PERFECT BLACK.

Create a Test Image for use in the calibration process.

The high value band (0, 2, 4, 6, 8, and 10% black), and low value band (90, 92, 94, 96, 98, and 100% black) should be clearly visible in the final print, and constitute a check on the printable tonal

After the negative has been printed, a strip in the middle of the white column (dense in the negative) is covered with an opaque tape, while a strip in the middle of the black column (no density in the negative) is cut away.

RANGE of the negative. In the center, are a black column and a white column.

In the final silver contact print, the entire "black band" should be black, and, as we shall see in Step 2, the entire "white band" should be white and with good tonality in both the high and low value scales. The final silver print should look like the source document.

You may download the source image at the left by performing a "Save AS" on the image at the right, and resizing it to the size desired. - But be sure NOT to resample when changing the size or you will create fuzzy edges.

Using the chart above to find the exposure needed for PERFECT BLACK, the fully developed contact test strip of the test chart above will look like this.

The exposure time at which the black band created by the cutout area is no longer identifiable is that which should be used in all subsequent experiments and production. This is the basic exposure time for MAXIMUM BLACK with the chosen -

- materials
- exposure light intensity and color
- developer and development time

Change any, and the value of BLACK will change!

To assure that the light intensity with my Beseler 23CII Dual Dichro enlarger, is the same for EACH EXPOSURE, I use an Ilford EM10, which has the adjustment dial taped at the setting established during the calibration process. After allowing the enlarger light to somewhat stabilize (a rather indeterminate time), I raise and lower the enlarger head until both the green and "high" red light are illuminated. This is a very narrow range and assures maximum repeatability. In fact, the light in my enlarger is so unstable that the best I can get is to have both lights flicker back and forth during the exposure. For the materials described here, I find a 37 second exposure is very close for an EM10 setting of 16. DO NOT assume that once set, the enlarger illumination will remain stable. Mine changes VERY quickly! I have chosen to -

1. place the printing frame on the easel
2. cover it with a black plastic sheet from a paper package
3. turn on the enlarger light source
4. raise or lower the head until BOTH the high-red and green lights on the EM 10 flicker on
5. quickly turn off the enlarger light source
6. quickly remove the black sheet
7. expose with the timer.

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Step 2

Find Ink Combination for the Proper "Effective Density" to Print Pure White .

We want a negative that will print - *with the exposure time determined in Step 1* - PERFECT WHITE (Photoshop 255) and PERFECT BLACK (Photoshop 0) while showing tonality at 5% and 95% black . During this step it is MANDATORY that the exposure derived in Step 1 be maintained!

While Step 1 is analogous to what Fred Picker described as determining the exposure for the "Proper Proof" print, Step 2 represents finding the development needed to produce the perfect negative density (remember "Expose for the shadows, DEVELOP FOR THE HIGHLIGHTS").

Graded silver halide photographic paper is designed to be sensitive to a limited spectrum (that's why safelights work). Variable contrast papers have multiple emulsions typically sensitive to blue and green light. An excellent explanation of the sensitivity of Ilford Multigrade papers is found [HERE](#).

Ink jet printers, provide a finer and smoother dot pattern with colored ink than when printing with only black ink. An experiment with colored ink will quickly demonstrate the effect of the various colors (including the mix producing a grayscale) on the photographic paper of choice.

A grayscale was colorized with the Color Picker to hues representing 30 degree intervals on the color wheel. The resulting "negative" was then contact printed on Ilford Multigrade FB paper with the "mirror image" results shown.

Hue = 60 (yellow) has little effect in blocking exposure to Ilford MGFB.

Hue =180 (cyan) is the least effective in blocking exposure.

Hue = 300 (magenta) clearly is the most influential in determining contrast.

My original experiments and negatives were made with HUE=0. The description below applies regardless of the basic color chosen. I currently use HUE=300 which eliminates the presence of yellow dots.

In my view, the [Transfer Function](#) is the best way to create or modify an adjustment curve.

If HUE=300 (MAGENTA) provides too much contrast for the Epson Photo 1200 printer, and is just right for the Epson Color 740 printer, perhaps the difference is in the amount of ink deposited. To test the theory, I repeatedly printed a test block of HUE=300, lowering by 5% the setting of the 100% value in the Transfer Function (Page Setup>Transfer Function). This reduced the amount of ink deposited at each step.

I then made a photographic print of the blocks after placing an opaque strip down the middle to provide a reference for maximum white. My test with my Epson Photo 1200, Epson inks, and HUE=300 (MAGENTA), indicated that the first area in which the test block was indistinguishable from the white reference strip, for Ilford Multigrade FB paper was somewhere between 75 and 80. I made a second series of tests varying the Transfer Function from 75% to 80%.

The Transfer Function screen permits the adjustment of the curve by either entering the individual values, or "pulling on" the curve at the various points. When used for the purpose described here, the line remains straight, altering the image by simply depositing less ink overall.

The illustration shows a setting of 70%, found effective for negatives made with Epson Photo Quality Glossy Film with RED (HUE=0) ink, when printed on Ilford Multigrade FB paper, As shown above, magenta ink requires a slightly higher setting - 80 seems to work.. These are MY results, with MY equipment, and MY supplies, Yours WILL differ.

Two negatives were made of the Merry Go-Round image, the source for which is shown here. Both were colorized with the Color Picker.

NO Adjustment Curve was applied to either - although obviously needed!

HUE 300

ONLY magenta ink

Transfer Function set to 80%

Prints made using exposure time to provide "perfect black" as determined in Step 1.

HUE 120

ONLY cyan and yellow ink
no Transfer Function

Print made from the green negative, using 60cc magenta filtration to increase contrast. Exposure increased for "perfect black".

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Step 3

Create an Adjustment Curve

to adjust the intermediate tonal values for an expressive print.

Photographic emulsions react to light in a non-linear manner, taking a while to get excited, then gradually getting saturated and tired. Printing paper emulsions behave in a like manner and are engineered to compensate for the nonlinearity of the film sensitivity. If you present a perfectly linear grayscale to a paper emulsion, the results will be disappointing. The task, therefore, is to create a modification curve that will alter the tonal values of your perfect image to those expected by the paper emulsion you have chosen.

The target, I now prefer includes a step wedge and samples of the high value and low value bands from the target made in Step 1.

Differences between the silver print and ink jet print can then be estimated and corrections made to the curve. I prefer making adjustments to the curve with the **Transfer Function** in Photoshop, where changes can be made numerically.

Step A

STANDARD INK JET PROOF PRINT

Using the printer, paper, ink, AND printer settings chosen for ink jet proofing, print a test scale. These materials and settings should be EXACTLY the same as those that will be used to confirm the expressive quality of the images.

Performed only once to get a proof print to be used in the repeated executions of steps B & C.

Step B

INK JET NEGATIVE

Using EXACTLY the same procedures and settings determined for maximum black and perfect white in Steps 1 & 2, make a negative of the test scale. The first try may be WITHOUT any correction curve, or with the sample curve provided below.

Subsequent tries will use the curve as altered in response to the print comparison described below.

Step C

SILVER PRINT

Using EXACTLY the same materials, procedures and settings used to make a print with maximum black and perfect white in Steps 1 & 2, make a contact print with the test scale negative. Be sure to finish it EXACTLY as you will the final prints - same paper, developer, timing, toning, and washing aids if used.

After the silver print is dry, trim the edge as shown and place over the scale printed with the ink jet printer in step A above.

To reduce the effect of color and texture differences when viewing two different types of paper, I place a piece of Plexiglas over both and view the values with a Kodak WRATTEN No. 90 filter.

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Estimate the change needed to bring each step of the silver print to the same value as the ink jet print. Shifting the silver print sideways may help asses the differences. For example, shifting the silver print to the left one space may show that the 20% value is close to 10% value of the ink jet print, indicating that the adjustment curve be altered to lighten the 20% value by nearly one step. There is no substitute here for experience and practice, although a densitometer or even a flatbed scanner will help.

THEORETICALLY (that is in capital letters!) If you get a silver gray scale that in indistinguishable from the ink jet proof scale, any silver images produced in the same manner will also be indistinguishable from their ink jet proof print. HAH! But they will be close and I have found that slight changes in the curve resulting from printing actual images, can serve to hone the curve to near perfection.

BUT! Remember the caveat in the section on image preparation. All I am saying here is that the silver print SHOULD match the ink jet proof. After viewing the silver print, you may decide to alter the actual image in Photoshop. Remember there is a perfect response curve for EACH image, which is precisely why some master printers try various papers and developers in the search for the perfect print of a given negative.

Adjustment Curve for the Epson Stylus Photo 1200

for Ilford Multigrade FB Paper

Zone VI paper developer (1:3)

3 minutes @ 20 deg, C

*negatives to be printed with **HUE=0***

&

Transfer Function **100%** value set to **70**

When making adjustments to a the curve in the Transfer Function, the changes are being made to a 100 point percentage scale. After conversion to RED ink with the Color Table, the maximum density is only 56 percent. Although the photographic paper reacts to the color as well as the density, and the mix of magenta and yellow continually changes, altering the grayscale by one percentage point may not alter the final result by an equivalent amount. Some experimentation is necessary.

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Finale

Mr. Burkholder's suggestion to include a calibration grayscale or step tablet on the negative is mandatory during calibration and useful when the expressiveness of the final print is less than you desire. It will also save time if you change paper (either negative or photographic), developer, computers, OR if the printer manufacturer changes the print driver.

To test for perfect black and perfect white, I prefer to use a scale with only the upper 10% and lower 10% values (the "high value band" and "low value band" from [Step 1](#)).

After the negative has been printed (and dried, if necessary), I have found it useful to place tape across part of the 100% density end of the grayscale, and cut away a strip of negative material in the 0% black end of the grayscale. The tape will prevent any light from reaching the photographic paper and will assure maximum white. The hole will provide extra exposure and assure the maximum black. In this manner, areas of the image with 0% black (Photoshop value 255) will be pure white on the print, and Photoshop value 0 will print as black. Examination of the scales shown enlarged below, will verify correct exposure and contrast, and show any deviation of white and black from the maximum.

There is a strong possibility that the negative WILL change slightly over time, as will the light source, AND your paper emulsion.

MY Check List Items for Making a Negative for Silver Printing

1. **Prepare the Image**, ready for output, expressively correct when viewed on whatever medium was chosen to calibrate the system (the monitor or a direct digital print).
 - Resize file?
 - Sharpen?
2. **Add the Grayscale** if desired (highly recommended if space available)
3. **Flatten the Image** ([Layers/Flatten Image](#)), if layers have been used in the preparation, or as the result of adding the grayscale.
4. **Flip Horizontal** ([Image/Rotate Canvas/Flip Horizontal](#)). Since the image is to be contact printed "face-to-face" with the printing paper, a mirror image must be used for the negative.
5. **Adjust Curves** ([Image/Adjust/Curves](#)). Apply the appropriate curve (created with the Transfer Function in Step 3) for the negative material, printer setup, ink, and printing paper to be used.
6. **Convert to Indexed Color mode** ([Image/Mode/Indexed Color](#)), to prepare to invert and colorize with the "Color Table".
7. **Build and Apply the Color Table** to the image ([Image/Mode/Color Table](#)).
8. If the **Transfer Function** ([Page Setup/Transfer Function](#)) is to be used to adjust the overall density of the negative, be SURE that it is properly set prior to printing!
9. **Print the Negative**, using EXACTLY the same material and printer settings used to calibrate the system.

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BE SURE to perform ALL image manipulation items (1 thru 5) **BEFORE** converting to INDEXED COLOR mode (item 6)!

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Development of films designed for a normal pictorial characteristic curve, should begin with the manufacturer's recommendation. Most microfilms do not fall in that category and require modified development schemes to achieve the full grayscale associated with pictorial photography. Although I have had excellent results with Kodak's recommended Technidol developers for Tech Pan, I have found Rodinal with sodium sulfite provides me with more control and much shorter development times. Since Rodinal is a reasonably active developer and will produce VERY contrasty results with normal development, higher than normal dilutions and limited agitation, are needed to produce a normal contrast index.

The traditional spiral developing tank in which developer flows through narrow passages between layers of film creates serious problems for high energy developers when limited agitation and/or high dilution is used to control contrast. Special care is required with the agitation pattern, especially with 35mm film to avoid streaks from developer swirling through the sprocket holes. Several solutions have been proposed for a 35mm developing tank. The simplest, the "golf tube", proposed a number of years ago by an author to whom I wish I could give credit, is inexpensive and works quite well. The only disadvantage of the "golf tube" is the need to work in the dark because of the absence of a light trap.

Kodak is quite specific in their directions about the agitation method to be used with Technidol - different for the solid version than for the liquid. Both involve carefully lowering the loaded reel into the developer rather than pouring the developer into the loaded tank.

A 35mm technique which has, for me, provided the best results with the traditional spiral tank, was suggested by Bill Hoy of Bedford County, VA.

- Use a tank at least twice the size needed for the number of reels you plan to develop.
- Fill the extra space with empty reels, placing the film at the bottom of the tank.
- Pour in just enough developer to cover the film, then simply invert the tank at the specified interval, draining the developer completely from the film.
- After five seconds, reinvert the tank, reimmersing the film.

The developer volume I use results from noticing that [Minox rolls developed in a 250cc tank](#) looked much better than 35mm rolls developed in the same tank. I concluded that the actual amount of developing agent was a factor in the degree of reduction of silver halides. Negatives developed with too much developer, regardless of dilution seemed to have a better tonal distribution. I chose [as a minimum](#), the amount of developer in a 1:25 dilution in a 250cc tank, for a 36 exposure 35mm roll of film. Thus, for such a roll, 10 cc of Rodinal concentrate should be present in the tank, regardless of dilution. A Minox roll, with approximately 1/10 the exposed area, would require 1cc. In practice, I use less (6.5cc) for 35mm and more (2.5cc) for Minox. The Minox negatives still look better! Remember that these are MY results, with MY equipment, and MY procedures, AND MY EXPECTATIONS. Your results WILL be different.

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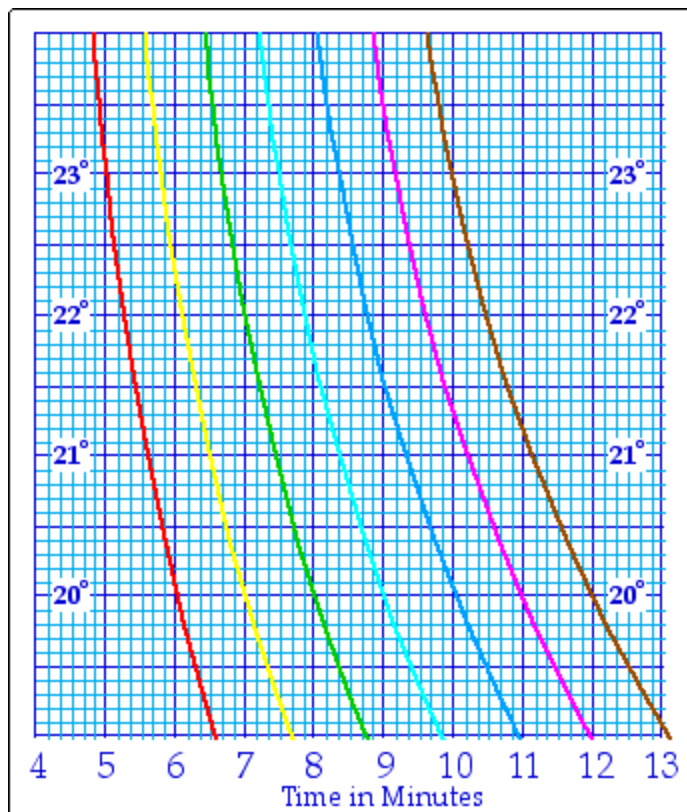
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I generally develop film with either Rodinal or PMK Pyro, each of which produces negatives expressively and physically different from the other. So, with the variables of scene luminance and film selection, as well as choices of developer, dilution, and development time, the possibilities are endless - and that's what makes it FUN!

The chart and table are the ones I am currently using. For PMK Pyro, I use the agitation scheme recommended by Gordon Hutchings, with only a single invert for Tech Pan and Super HR

Agitation for 1:50 Rodinal follows Agfa's directions on the Rodinal package.

The addition of infrared film to the mix resulted in the inclusion of XTOL and the time and agitation scheme from the Kodak website. When exposing according to the "f/16 Rule" using ASA 60 and the Rollei red filter, this time and agitation are excellent for me.



		# of inversions at each interval (sec)				
		Curve	15	30	45	60
Super HR	1:100 Rodinal	6				2
	PMK Pyro	8	1	1	1	1
Tech Pan	1:100 Rodinal	6				2
	PMK Pyro	8	1	1	1	1
FP4	PMK Pyro	12	1	1	1	1
"Regular" film	1:50 Rodinal	9	continuous	2		2
Kodak IR	XTOL Straight	8	continuous	2		2

Curve 6 is the curve that crosses the 20° temperature line at 6 minutes.

My Rodinal Development System

The description below is based on the exposure of Technical Pan film at a personal EI of ASA 25 - Using an EI of 25, a Zone I exposure will, with the following processing, produce 0.1 density above film base plus fog. IN MY DARKROOM! Yours WILL vary!

[A bit of History - Credit where credit is due!](#)

I use Rodinal diluted 1:100 with a solution made with 56g of sodium sulfite (anhydrous) per liter of distilled water (one LEVEL teaspoon of sodium sulfite is approximately 7 grams). The use of "anhydrous" sodium sulfite is important because it assures the correct amount of the compound per unit of weight.

I usually mix a gallon at a time and keep it under the counter with a jug of plain water for a 1 minute presoak. Both solutions are thus at the same temperature which I use to determine the development time.

Currently, for N (normal) development, I use the equivalent of a 6 minute total time at 20 deg. C.

I presoak Tech Pan for 1.5 minutes in distilled water of the same temperature as the developer. I don't remember why a minute and a half, something in the distant past, but it seems to provide a more even development. It probably also lowers the contrast a bit since it takes time for the developer to displace the water in the emulsion.

I consider pouring the developer into the tank (already loaded with film) to be an agitation cycle, so carefully put down the tank without further agitation. The remaining agitation is provided at 1 minute intervals with Bill Hoy's method described above. With these short development times, both the agitation scheme and interval have a major influence on negative contrast and density

Because the limited agitation contributes to the lowering of negative contrast, it is the periods between agitation (similar to "water bath" development procedures) that supply the build-up of shadow detail. My best results are obtained near 20 deg C, both the time AND agitation interval being critical to the shape of the curve. I have never tried temperatures less than 20 deg. and have read somewhere that the characteristics of developers significantly change with lowered temperatures. Perhaps someone near the arctic circle can contribute advice here.

PMK Pyro Developer

Rodinal has been my developer of choice for years. It replaced a magic brew of the distant past, "Perfection", which made enchanted images with Kodak High Contrast Copy Film (SO 5069). I have not seen negatives, or prints, with that velvet sharpness and tonality since their demise - until now. The first film I have found of the caliber of 5069 is Fiji Super HR (about the same speed - ASA 3-6?) developed with PMK Pyro.

Of course Pyro is not new, having been one of the first developing agents used. I have used ABC Pyro (Edward Weston's favorite) but never with small negatives. I have, for years, thought about trying Pyro as a tool to tame the extreme contrast of the super fine, high contrast, films I like, but Pyro has NOT had a reputation for fine grain. I finally got around to it and am now lamenting the wasted years.

The chemistry and Gordon Hutchings's book "The Book of Pyro" are available from the [Photographers' Formulary](#).

The credit here goes to Gordon Hutchings. It is a one-shot developer, and the best results are obtained by following HIS directions. If it is as good for me as I suspect it is, he deserves my praise and gratitude. If you are going to try this, buy his book!

The only disadvantages I have found so far are the time necessary to develop a roll, and the inability to intensify individual roll-film frames with selenium toner. Negative

Kodak Technical Pan Film

	<u>Rodinal</u>	<u>PMK Pyro</u>
Pre-Soak	1.5	1.5
Develop	6	8
Stop	0.5	1
Fix	0.5	0.5
Wash	1	
Alkalie Bath		2
Clear	1	
Wash	1	30
Total Minutes	11.5	43

toning with Kodak Rapid Selenium toner is an excellent way to adjust the contrast of individual frames of roll film. With Kodak Tech Pan developed in Rodinal, I have achieved an N+2 increase in the slope of the characteristic curve. So far, I see very little density increase with selenium, FP4, and PMK, a confirmation of Mr. Hutchings observations.

I can tell you that it is possible to get a good print from a negative that looks TERRIBLE! Also the look of the negative is not necessarily an indication of the appearance of the final print. This is just the beginning but I have the best prints I have had from the Minox in years! But be sure that this is NOT a cookbook solution. It is an experimenter's delight with what I think is a worthwhile payoff.

For my critical Minox work, I use Fuji Super HR developed with PMK!

Oliver Pyper writes from Berlin:

- Tech Pan film, 25 ASA
- 100 ccm, PMK developer in beaker,
- Minox developing tank
- 6 minutes at 20 deg C.

1. Presoak 1 min with water and photoflo
2. Empty presoak solution
3. Add PMK solution until the tank is filled
4. For agitation, every minute (takes about 8 seconds)
 - Pour out about 20 ccm of the developer from the tank into the beaker,
 - then fill up the tank again from the beaker.



DANGER:
PYRO MAY BE FATAL IF
SWALLOWED

I put this label on all of my bottles of PMK
It can also apparently be absorbed through the skin. One should scrupulously follow the safety directions provided with the materials.

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*A bit of **History** & **Credit** where credit is due!*

Before Technical Pan film, Kodak produced a film called High Contrast Copy Film. It had extremely fine grain, virtually invisible with a grain magnifier, and exceptional sharpness. 11x14 inch prints from 35mm negatives could rival those from 4x5 negatives made with "normal" film. The problem was excessive contrast. As quoted in a 1979 article in "Darkroom" magazine, "In 1967, Marilyn Levy, a photo research specialist for the U.S. Army, published the formula for "POTA", an elegant simple to make developer that dramatically lowered contrast without lowering the film speed." The developer I came to favor was called "Perfection", the formula for which is now, sadly, long lost.

In the late '70s, Kodak abandoned High Contrast Copy Film, replacing it and "Solar Flare Patrol Film" with a single emulsion called Technical Pan Film. This was like a red flag to photographers, and the rush began to find the best developer. The original Kodak recommendation was of course POTA. Various dilutions of most common developers were tried and reported in endless magazine articles. Two I remember were dilute Edwal FG7 and Rodinal, each mixed with sodium sulfite. I felt that the Rodinal solution provided a bit more "edge" and chose it as my standard. Kodak followed the POTA lead and soon marketed a variant called "Technidol", first in solid form, then liquid.

I owe my thanks to whomever wrote the article for "Photographic" magazine in the late '70s.

The **various available developers** provide variable low value (toe), and high value (shoulder) results and can be useful in special situations where one or the other is to be optimized.

The "new kid on the block" is of course **PMK Pyro**, and the credit here goes to Gordon Hutchings.

Super HR & PMK Pyro

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a Minox, Fuji Super HR film, & PMK Pyro Developer

Rodinal has been my developer of choice for years. It replaced a magic brew of the distant past, "Perfection", which made enchanted images with Kodak High Contrast Copy Film (SO 5069). I have not seen negatives, or prints, with that velvet sharpness and tonality

since their demise - until now. The first film I have found of the caliber of 5069 is [Fuji Super HR](#) available from [Filmdex](#) (about the same speed - ASA 3-6?)

The early morning fog in Morro Bay was thin, the light diffused and luminous. I loaded a Minox B with Fuji Super HR, metered the scenes, EV range of 9-14, shutter speed of 1/30 sec. (since the film-developer combination is still unfamiliar, and I have not run my usual film speed tests, I confirmed by the bracketing). I was particularly concerned with the ability of the film to render the tonality as everything disappears into the fog. I exposed two rolls, developing one with my usual Rodinal procedure. The second was developed with [PMK Pyro](#), following Gordon Hutchings' recommended agitation. The PMK Pyro prints, using Mr. Hutchings' recommendation of variable contrast paper, exhibit similar acuity, no visible grain, and marvelous highlight rendition. The two developers, for me, produce expressively different results. My suspicion is that each is ideally suited to its own set of conditions, and as was true with Rodinal, I will need great deal of experimentation to discover the ideal exposure and development needed to optimize PMK for various visualizations. In the fog, PMK Pyro is enchanting.

Although I have spent a great deal of time discussing Minox films, I have made some of my most delightful negatives with 120 size, 6x6cm and 6x9cm, Ilford FP4, and PMK Pyro, a combination for which I must thank Mr. Hutchings.

Negative toning with Kodak Rapid Selenium toner is an excellent way to adjust the contrast of individual frames of roll film. With Kodak Tech Pan developed in Rodinal, I have achieved an N+2 increase in the slope of the characteristic curve. So far, I see very little density increase with selenium, FP4, and PMK, a confirmation of Mr. Hutchings observations.

I can tell you that it is possible to get a good print from a negative that looks TERRIBLE! Also the look of the negative is not necessarily an indication of the appearance of the final print. This is just the beginning but I have the best prints I have had from the Minox in years! But be sure that this is NOT a cookbook solution with these films. It is an experimenter's delight with what I think is a worthwhile payoff.

Kodak Technical Pan film - Minox B, 1/500 sec. - PMK Pyro, 6 minutes at 22.5 deg C., Gordon Hutchings' recommended agitation - 6x8 inch print on Ilford Multigrade IV RC paper, white light, f/5.6, 17 second exposure.

I would recommend starting with your usual film speed for the "microfilms" and development in the 5-6 minute range, with Gordon Hutchings' recommended agitation schedule. I have so far been setting my automatic exposure Minox C at -

[Tech Pan](#) - ASA 50

[Fuji HS-U](#) - ASA 25

[Agfa Copex Rapid](#) - ASA 12

[Fuji Super HR](#) - ASA 6

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These are just twice the film speeds established when testing for a Zone I density of 0.5 above film base+fog.

Although the Minox is not the first camera that comes to mind when discussing landscape photography, it can dramatically lighten the load when in the back country. This combination of film and developer eliminates any "image type" concerns the photographer may have harbored, with lovely 6x8 inch prints possible.

But beware - The impression of sharpness can be enhanced by the presence of grain, the absence of which may contribute to a feeling of softness. This is not a problem with large and medium format negatives, but is a consideration with the 8x11mm negatives of the Minox. I prefer the silky smooth tonality.

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everything Minox!

[The SubClub](#)

Amazing site. Everything about Subminiature Photography.
Go to [The Gallery](#) for images from, and links to, some of the best in Minoxdom.
or [The Coffee Shop](#) to participate in discussions with others who cherish subminiature photography

[GoatHill Photo](#)

Supplies for subminiature cameras from the host of the SubClub.

[John's MINOX Link Page](#)

Excellent place to start searching for everything Minox

eBug [Cameras](#), [Accessories](#), [Equipment](#), [Books](#)



[Minox Historical Society](#)

A new group, dedicated to everything Minox. Growing fast! Mark it!

[Michael Goldfarb](#) Wonderful photographer, Minox Meister, my first e-friend

[Godfrey DiGiorgi](#) Wonderful EYE, master of the Minox, scanning, & digital photography

[John 'Wonco' Watson](#) sharing his talent for site design and Minoxery

[Those Marvelous Minox Cameras!](#) Great site by D. Scott Young

The Don Krehbiel Archive

Submini-L:
The Subminiature Photography Mailing List

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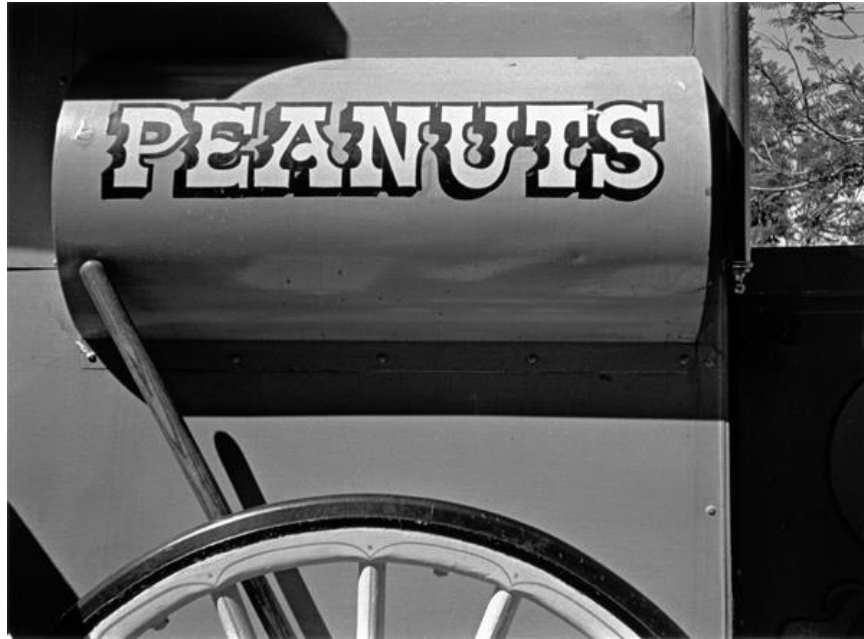


MINOX HISTORICAL SOCIETY

Submini-L:

The Subminiature Photography Mailing List

Film & Darkroom Technique



Film & Darkroom Technique

Re: MINOX EC vs Other MINOX cameras (1997-01-10T22:33:27)

An interesting observation about the EC vs, in this case, a C. I borrowed an EC, loaded it and my C with Tech Pan and went to the pier. There are boats in the harbor, people, old buildings, and pelicans. There was a continually changing mix of near, middle, and far subjects. I just made photographs with the EC. With the C, I had to check constantly to make sure I was focused AND more than once I forgot to change the focus, and you know what that means. For 4 x 5 prints, the EC prints are all within the depth of field. A couple of the C prints are fuzzy at ANY enlargement. I am long past my physical and/or mental prime, but I do have a significant number of fuzzy negatives dating back to the '50s. My vote goes to the EC as a really fun camera, which will probably provide the greatest percentage of useable images. You just need to know the depth of field limits for the enlargement you anticipate and stay within that limit. Please just don't compare it with a III, or C, or LX, or Leica, or Hasselblad, or Deardorf. You don't compare your children.

P.S. With the flash, it was a blast in the livingroom at Christmas with the grandchildren. Camera AND flash disappear into a shirt pocket.

P.P.S. My wife's automatic everything camera, which produces excellent 35mm images, is not immune to focussing on the wrong thing, and/or setting the exposure with the wrong area.

Don

Source: AOL

Fixing Prints (1997-01-12T16:13:04)

This question is not Ultra-Mini specific, but since I do not treat negatives differently just because of their ancestry, I hope it is permissible. It relates to fixing prints.

Historically we have heard that a two 5 minute immersions in hypo was required for proper removal of unexposed silver. Ilford then pioneered the use of "film strength" fixer for 30 seconds (later 1 minute) to

reduce the washing time. Both systems have proven valid according to my tests with Kodak ST-1 (Sodium Sulfide). I have observed staining during selenium toning with Kodak Elite papers, and corrected it with a longer fixing time. Kodak's alternate residual silver test is to use a 1:9 dilution of Rapid Selenium Toner and look for stains.

I now have realized a LONG term dream. A print yesterday, on Multigrade Fiber with Dektol and Benzotriazol, developed, in about 6 minutes of 1:20 Selenium toner, the most gorgeous, creamy, "musty" warm, subtle tone I have been trying to achieve for years. The Kodak Rapid Fix, film strength, was freshly mixed, but from a gallon I got several years ago and decanted into quart bottles. So the fixer is suspect.

My guess is that the print was inadequately fixed and that I am seeing Kodak's Alternate Residual Silver Test in action. SO, what is the condition of the print AFTER extended selenium toning, and proper washing? If selenium replaces the silver in the print, then what is left to deteriorate? I know what the "school solution" is, but for years the "school solution" said that selenium toning was for prints, NOT negatives, but that's another story.

--

Don

Source: AOL

Re: Minox enlarger (1997-01-18T21:27:09)

MARTIN TAI wrote:

>

> According to a Minox dealer, new Minox enlarger is still available
> from Minox, listed at C\$1600 (about \$1100), and a Minox enlarging
> lens' retail price is C\$800 !

I have always been fascinated with the Minox enlarger, and if space is scarce it is surely an asset. HOWEVER, I have always favored a diffused light source, cold light or color head for black and white, and would think especially for the extreme enlargement of the Minox negative, and when trying to minimize grain, dust, and scratches, a bare-bulb light source would be less than ideal.

Is there something about the Minox enlarger that would make it a

worthwhile addition to a darkroom already equipped with a "normal" enlarger?

Don

Source: AOL

Re: 16mm Kodachrome (1997-01-20T21:34:56)

Joe McGloin wrote:

> Kodachrome came out in 1939 (not 1961).

May I ask a non-ultramini question of the historians among you? Some of my most delightful Kodachromes are on the original(?) ASA 10 film. As I recall, there was Kodachrome II, and then in the '70s, 64 and 25. When I was printing Cibachrome, I thought the old slides from the '40s and '50s were the prettiest, subtle and with much "smoother" feel than 64 or 25. What is the chronology of this film?

Don

Source: AOL

Re: film chronology (1997-01-21T15:33:40)

Bernard Delgado wrote:

>

> If you havent started surfing the Kodak page yet, here's the location for
> the chronology of Motion picture film 1910-1996.

> <http://www.kodak.com/mptviHome/chron.shtml>

Thank you Bernard for your research. I went to the Kodak site and found your reference and a complete Kodak history which includes the Kodachrome references at

<http://www.kodak.com/aboutKodak/kodakHistory/Milestones33to79.shtml>

VERY interesting.

--

Don

Source: AOL

Half-frames (1997-01-23T21:34:53)

All of this talk about half-frame finally got me out of my chair to find my first camera, an Ansco Memo. It is a leather covered, wooden box, in which the film is advanced by pushing down on a lever in the back of the camera. The lens is an Ilex-Ansco Cinemat F:6.3. There is no focal length shown. Many of my junior and senior high school negatives, and those from the top of Half Dome and George Washington's head were made with this camera. The patent date on the back is 1929

But, what interests me is that since the film travels vertically, the half-frames are horizontally oriented. Am I correct in assuming that all half-frame cameras are designed for "landscape" rather than "portrait" orientation.

Anyone know who would be able to R&R the mechanism? I would like to load up some Tech Pan and try it. The film in the '30s was pretty bad.

Don

Source: AOL

Minox cassette GOTCHA (1997-01-24T22:21:24)

Overconfidence and stupidity may be synonymous. I knew that the old cassettes with the taped on caps had felt light traps, but the ASA 25 ULTRA (AgfaPan) from the =9170s had no felt. This week I loaded six cassettes, some of which I had not previously used. As usual I spread out everything where I could find it in the dark. I have never worried about which cover went with which cassette. In 2 of them I could not pull the film out of the supply side to attach the takeup spool. I had noticed that when placing the caps on the supply side in the dark, there did not seem to be a =93snap=94 but ignored it. Mistake #1. It turns out that there are indeed black plastic cassettes out there WITH felt liners. The film channel is much thicker and caps from the =93feltless=94 cassettes WILL NOT fit. That is wrong. They WILL fit, but pinch the film so it will not move. I now have a picture of the problem in the=20 "devices to slit, load and develop Tech Pan for the Minox" link of the "film" section of my site.

I obviously have acquired some new cassettes.

Don

<http://www.slonet.org/~dkrehbie/>

Source: AOL

Rollei 35T & C-41 (1997-01-30T13:25:45)

2 questions.

1. I just saw a "Just Serviced" Rollei 35T at our most reputable camera store for \$219. Am I correct that a number of you have been extolling the virtues of this camera? Is this a good price?
2. I am about to try developing color negatives for the first time in 20+ years. Any suggestions on which current chemistry is best,...and where to get it. I will be developing Minox negatives in my 250cc Nikor tank.

Thanks, Don

Source: AOL

Re: Rollei 35T & C-41 (1997-01-30T15:44:02)

Peter Zimmerman wrote:

> What film are you doing?

I just shot a 15 exp roll of Fuji 800 inside the old Mission, and my order of Kodak PJM Ektapress Multispeed just came. I also got a roll of Ilford XP2 to try again after 20 years. So, you see, I AM multiemulsional. Actually I may just send them all to Minox rather than get back into color chemistry. C-41 is C-41 isn't it?

Don

Source: AOL

Re: Minox lens quality (1997-02-10T12:45:56)

I recall when in Germany in '52-'53 a photographer friend had just come from NY where he had spent considerable time sorting thru and testing Japanese lenses looking for the best one. I got the impression that the good ones were quite good and the bad ones were quite bad. I happen to have an excellent Nikkor 43-86 zoom which is generally given a bad rap. Are we really talking about quality control here? I have always thought that my Minox C was not as sharp as the old IIIs, an assumption I have now finally rejected and put to rest.

How can you test the lens quality when the film is wandering around in a cartridge? I assume that the 110 cameras do not have a film gate like the Minox. Wasn't this the concern when they first came out?

Don

Source: AOL

Re: Resolution of US spy satellites (1997-02-11T13:51:58)

Peter Zimmerman wrote:

- > the early spy satellites used a Tessar design lens, just like the Minox and
- > (b)the early films were not as good as today's TechPan bought over the counter.

So why can't I capture the data they could (can)?

Don

Source: AOL

Re: Resolution of US spy satellites (1997-02-11T14:51:11)

Peter Zimmerman wrote:

- >
- > On Feb 11, 1:51pm, Don Krehbiel wrote:
- > > Subject: Re: Resolution of US spy satellites
- > > Peter Zimmerman wrote:
- > >
- > > > the early spy satellites used a Tessar design lens, just like the Minox and
- > > > (b)the early films were not as good as today's TechPan bought over the
- > > counter.
- > >

> > So why can't I capture the data they could (can)?
> >
> > Don
> >-- End of excerpt from Don Krehbiel
>
> Because you're not tall enough. :-) And don't run as fast.
>
> pz

Thanks. I asked for that!

So what question do I want to ask? I have always assumed that identifying my car from a gazillion miles away required some really high tech optics and film. Are you saying that my Tech Pan negatives from my Nikkor 55mm Micro have the same data recording capacity?

Don

Source: AOL

Re: Alternative sources for minox film? (1997-02-15T11:47:59)

E. George Oeser wrote:

>but I can't say that I am too terribly impressed
> with the selection of films offered by Minox.

AgfaPan 25 is a fine film. In the tests I just ran with Tech Pan, AgfaPan25, and Ilford 100 Delta Pro, the agfaPan 25, predictably had finer grain than the Ilford- about halfway between the Ilford and Tech Pan. If you are not used to Tech Pan and don't have the time or facilities to establish your own "standards", an important trip is not the place to start.

I do think that the Delta Pro is a good film and plan to use it with 6x6cm, but hesitate to recommend it over any other for the Minox. I just haven't done enough comparisons to feel comfortable making a recommendation.

Another factor to consider is the uncertainty of using someone else's "home-loads". I always buy film in bulk, AND I am ready to accept the consequences of mistakes that I make. I have probably "self-loaded" as many rolls of film for the Minox as anyone, BUT I am not sure that on an important trip like yours I would not feel more comfortable with

"factory loads", just fewer of them. BELIEVE ME, I understand your financial constraints, and I am envious in the extreme of your trip, but don't cut corners or try to experiment on a once-in-a-lifetime experience. I have a VERY close and long-standing relationship with Murphy.

Please note however that just using "factory loads" will not guarantee perfect images. I have had scratches from "store bought" AgfaPan 25. Dirt is not restricted to inside self-loaded cartridges.

Don

Source: AOL

Re: Alternative sources for minox film? (1997-02-15T15:26:44)

Peter Zimmerman wrote:

- > TechPan is the ultimate fine grain film for a Minox. Fine, but
- > it also is tricky and may not be what you want in the forest. The
- > extended red sensitivity tends to do funny things to foliage, rather like IR
- > film I think.

Tech Pan does darken foliage, and is a bit unpredictable in the woods, BUT it also does some WONDERFUL things. There is a lot of red in conifer bark which is rendered like no other film. The red sensitivity produces results quite different than that of just putting on a red filter.

Don

Source: AOL

Re: Alternative sources for minox film? (1997-02-15T15:31:15)

lui wrote:

- >
- > > I have a VERY close and long-standing relationship with
- > > Murphy.
- >
- > A relationship..
- > Thought the film I left in the Minox C was a AGFA Ortho 25. Arghh- think
- > this black worm is a AGFA PAN 400.. Farmer, Farmer bleach it please ;)

>

> Lui

I didn't know that Murphy visited also in Vienna.

--

Don

Source: AOL

Re: Kodak 3414 film in Minox? (1997-02-15T15:41:42)

David Josephson wrote:

>

> > >Has anyone tried Kodak's High Definition Aerial film in a

> (at EI 6 developed in Rodinal 1:50)

The ISO 6 sounds like the old High Contrast Copy film which required special processing, but the Rodinal 1:50 sounds like normal contrast.

This sounds like a real find! Tech Pan is 4 mils thick so 2.5 mils is really thin, but, as you say, that is less of a problem in the Minox. Stay with it! ISO 6 is fine out in the open, during the day.

Don

Source: AOL

Old Developer (1997-02-17T19:38:54)

lui wrote:

> ...or its my old theory- never use absolutely fresh developer.

For years I have heard people recommend the addition of "old" developer to new. Sort of like a "starter" in sourdough bread. Why?

Don

Source: AOL

Re: Safelights (1997-02-19T19:35:33)

Peter Zimmerman wrote:

> little "Delta" amber bulbs

I have a Kodak "bullet" light with OC filter and some other strange cheap looking green box with an OC filter and have never had a problem. I extensively tested the counter area (with little objects sitting on the paper) and found no image after six minutes. Are you sure you have "safelight" fogging? Sometime ago I bought a supposedly safe light bulb at the camera store. It was not the same color as an OC and I think not as effective.

Don

Source: AOL

film tests (1997-02-21T09:26:37)

I am in my "film testing" mood again. It happens every twenty years. I was going to slit each film and use a Minox, but that is absurd, for obvious reasons, and I can use 35mm in my enlarger with the same lens and setting as I would with a Minox negative. SO....

Since I am not testing a lens, I plan to use my Nikkor 55 micro and photograph boats in the harbor, etc. So, what films should I test. I cannot test the new APR films which do not yet come in 35mm (or do they?).

My short list is as follows:

Tech Pan (25)

AgfaPan 25

Kodak Royal Gold 25

Kodachrome 25

AgfaPan 100

Ilford 100 Delta Pro

Ilford XP2 (400)

Kodak PJM Ektapress Multispeed (640)

Fuji 800

Any others? What ISO 100 color film should I test and can I get it in

35mm?

Don

Source: AOL

Re: film tests (1997-02-21T12:02:58)

Joel Moskowitz wrote:

> The new generation of Kodak films are very sensitive to development.

We have an excellent lab in town and I am having them do all of the color developing. We are also working on a trick to allow them to develop the Minox C-41 stuff.

I never liked color ANYTHING anyway.

I am including Kodachrome 25 because there is a partially exposed roll in the camera.

Don

Source: AOL

film test (1997-02-21T20:04:16)

This is getting out of hand, but fun.

I think I will use my Nikon with the 55mm Micro at either f/5.6 or f/8.

My plan is to shoot

- (1) my test chart in both sunlight and shade
- (2) a full double page of the classified ads in both sunlight and shade
- (3) a series of exposures at the harbor with fishing boats in the distance, using various exposures to assess the actual film speed as well as visual quality and grain.

The 55mm lens in conjunction with cropping an 8x11mm image from the center should yield an image approximating a Minox with mild telephoto lens. Actually $(55/15) \times 50 = 183.33$. Am I not getting the same field I would get with a 183mm lens on a 35mm camera?

Anyway I am still planning and will happily welcome suggestions,

comments, and if not TOO critical of my mental capacity, criticism. I am also interested in whether this is useful.

It will be difficult to communicate the differences at 72ppi, but, based on some experimentation, I think useful comparisons will be possible.

This is the list after a few hours.

Tech Pan (25)

AgfaPan 25

Kodak Royal Gold 25

Kodachrome 25

T-Max 100

AgfaPan 100

Ilford 100 Delta Pro

Fuji's Neopan 100

Kodak Royal Gold 100

Fuji 100 SuperG-s

Kodak E100S Ektachrome

Agfa HDC (100?)

Kodak Royal Gold 200

Fuji 200 SuperG-s

Ilford 400 Delta Pro

Ilford XP2 (400)

Kodak Royal Gold 400

Fuji 400 SuperG-s

Kodak PJM Ektapress Multispeed (640)

Fuji 800

I have to go watch Jeopardy so more later

Don

Source: AOL

Re: Film thickness (1997-02-22T07:45:27)

Martin Tai wrote:

> I think it (techpan) will fit a bulk loader for standard 100' film.

It will, with ease. The outside dimension of the roll is about the same.

Don

Source: AOL

Re: New Fuji submini ?? (1997-03-10T12:27:46)

E. George Oeser wrote:

>

> Is there anyone on the list who has a contact at Fuji

I just talked to the "tech rep" at 1-800-800-FUJI about film and he said that the APS technology is now in the "New Reala" with emphasis on the "New". I can't find it anywhere in town so will wait. If Fuji is like Epson, you will have REAL trouble finding out anything about new products.

Don

Source: AOL

Re: 127 Black & White (1997-03-11T17:48:01)

Ben wrote:

> In Eastern Europe I know of one film, Adox(EFKE).

Adox KB14 was my favorite film of all time before it disappeared. As I recall, it started as German, then folded and was made in Hungary. There is a full page ad in my copy of The Rollei Book. I wonder if they still have the formula. I have 35mm negatives that print like pure gold, even by today's standards. A very smooth and silky feel and beautiful tonality. The KB14 was, for me, about ASA 20 and grainier than Tech Pan, so may not be the best Minox film, but I would give a lot for some 35mm.

Don

Source: AOL

Re: 127 film - memory lane (1997-03-12T08:46:46)

Michael Goldfarb wrote:

> Man does not live by Minox alone...

Right On, Michael!

OK, if you want to talk half-frame, I have for some time wanted to examine and print some of my old negatives, and since they were made with a half-frame Ansco Memo, I can legitimately discuss them here. The earliest are probably the 1932 Olympics in Los Angeles, made on surplus nitrate movie film. It is interesting in that I think the camera was much better than the film. I will develop a page for my site, but in the mean time I need to get the camera restored. It is a leather covered wooden box with an "Ilex Ansco Cinemat f/6.3" lens. Interesting configuration. The film is advanced from top to bottom, making the frames horizontal (landscape) with the camera in its normal upright position. I have cartridges, so will try Tech Pan to see how good it really was.

To whom can I trust this gem for restoration? Actually, I think they are not very valuable as collector's items, but I suspect ones first camera is to be valued in other than monetary terms.

Don

Source: AOL

Re: APS film thickness (1997-03-14T22:02:43)

August DeBarbarius wrote:

>

> Is the new Minox film that is cut from APS stock going to be scratched by early
> model Minox's' with curved rear lens elements worse than modern models? As
you

> know, the new film is supposed to be thicker. August

Good question. I had scratches on the Fuji 800 that I ran through my IIs. I never thought of that as a reason. Perhaps we need to get an opinion from MPL or DAG.

Don

Source: AOL

Re: Half frame (1997-03-14T22:15:42)

Peter Zimmerman wrote:

- > While the APS film format is
- > bigger than half frame

The APS "C" format is almost EXACTLY the same size as half-frame. It is the shape that almost exactly approximates the 8x10 shape

- > Anybody get back any prints from the super Minox color film yet? I mean
- > from film sold by MPL with all the right labels, not just homespun Fuji
- > which may or may not be identical to the Minox Pro stuff?

I talked to the Fuji Tech Rep wednesday and was informed that the APS film is what they call New Reala in the 35mm loads. Not just Reala, but NEW Reala. There isn't any in SLO yet. Is Reala spelled with 2 ls?

I would have to believe that it is the stuff.

Don

Source: AOL

Re: film gate clearance (1997-03-16T13:04:29)

Paul Rubin wrote:

- > Greetings, the recent messages about film thickness and scratched Fuji 800
- > has me a little scared.

Don't be scared until we find out from MPL, or Minox, or DAG.

Don

Source: AOL

Re: Minox film width (1997-03-16T14:37:44)

David Josephson wrote

> In comparing some factory loads I find that the usual width is 9.2 to
> 9.3 mm. Some posts have mentioned 9.4, the format is usually called 9.5,
> and the plastic cassettes I have will accommodate up to about 9.75. Is
> there a Minox design-center value?

Tee Hee! Now you know the dark side of designing a film slitteer. Actually, I think there is no "school solution" for this problem. When I have cut exactly 9.5, it is too tight in my cassettes. The "Plexiglas" slitteer (3 thicknesses of 1/8" Plexi) adds up to 8.99mm, to which is added the thickness of the double-edge razor blades. I have been using this measurement for years. The image sometimes gets near the edge of the film, but never a problem. Scanning a "factory load" of Agfapan 25 and importing it into MacDraw Pro, gives me 9.32, while the Asanuma slit film measures 9.12, using the same technique. My experiments slitting and loading in daylight indicate that the film should be narrow enough to fit up to JUST BELOW the rim of the supply chamber. If you have a way to measure the depth of the supply chamber, that, minus a hair, would, in my opinion, be perfect. It doesn't take much added width to make the film bind and place an added burden on the camera.

By the way, I THINK Kasemeier states 9.4mm. At least someone does.

I must add however that I do not have any accurate measuring devices. Images captured with the film scanner do seem to import to MacDraw Pro quite accurately and then can be examined to 1/1000 inch. Please don't nit-pic my actual figures or procedure though, the critical measurement is the one that makes the film just slightly narrower than the chambers of the cassette, and that could be in cubits.

Don

Source: AOL

Re: technidol vs. rodinal in minox tank (1997-03-17T12:36:22)

Peter Zimmerman wrote:

- > What I can say is this: even with the nice shadow differentiation in Rodinal
- > 1:100 I find that there is awful little margin for error towards underexposure

NONE AT ALL!! Tech Pan is an 8 stop film and the shoulder is treacherous. The slope at the low end (toe) and the need to find the start of the rise (to 0.1 above film base plus fog) is what really determines the film speed. If you get nice separation in the shadows of a 10 stop scene, the cumulus clouds are rather flat. If you want to be good to yourself when printing, Tech Pan has no latitude, ZERO!

- > Nonetheless, in my cameras
- > and my developing tanks I find that an EI or 32 or 40 is better than 25 but that 50 is overdoing it.

If we all had our equipment calibrated by the same person, on the same day, and made our tests, at the same time, in the same place, with the same equipment and conditions, THEN, our film speed ratings MIGHT be the same.if we were lucky.

I never worry about someone else's rating, unless it is way out of line, which makes me very suspicious of EI 200!

Don

Source: AOL

Re: Minox slitler & Fuji APS film (1997-03-18T20:04:42)

August DeBarbarius wrote:

- > Im going
- > to play with Fuji APS when I can

The Fuji APS film is in reality Fuji NEW Reala. We don't have any in town yet, but it comes in 35mm. Be SURE you get NEW Reala, emphasis on the word NEW.

The issue of dull blades has not yet surfaced so they apparently last quite a while. I am sure you will hear about it when the first set of dull blades gets replaced.

Just cut and have fun.

Don

Source: AOL

Re: Minox and Depth of field photography (1997-03-19T22:18:12)

Peter and Godfrey wrote:

> I agree with you that a photographer's camera needs to allow the
> photographer control depth of field and focus plane to truly be a useful,
> versatile instrument.
> ...
> >>Neither do they even design to tell the photog what aperture and shutter
> >speed are set.
>
> >I think that the utter inability of a photographer to have any control
> >other than composition over a picture taken with any modern small camera is
why the members of this list have stuck with Minoxes, Minolta 16s, half
> >frames, etc.

I have just had the Minox 35PL fixed and begun to use it again. I have
a spectacular 16 x 20 cibachrome of a Kodachrome sunset taken in Sedona
Arizona. I have no problem with the quality of the image. I DO have a
problem with the camera. It is fully automatic (except for focus). I
made the Sedona exposures by adjusting the film speed.
I have no idea what the aperture (DOF) is at any time.

So I agree with all that is said. And it applies to the difference
between the C, LX, and EC. So we are all expressing a concern over
losing control. A week or so ago Mr. Zhang asked for advice on a single
camera to take on a trip. One which would provide automatic functions
when desired AND allow manual control when desired. My Nikon FE does
this with the exception of auto-focus, which I would dearly love when
acting, with my long lens, as a "soccer grandpa" . For years I have
looked for a "point and shoot" that could revert to manual. I DO
understand that it is MUCH cheaper to make chips (auto) than dials
(manual), so what do Mr. Zhang and I get for the "perfect" camera?

I must add that as much as I love my Minox, THERE IS NO SUBSTITUTE FOR

NEGATIVE SIZE! I don't believe for a minute that Mr. Zapp intended it as a substitute for 35mm or any other format. It DOES fulfill magnificently his desire to provide a way to always have a camera, make excellent images, and in some cases, allowing images that are impossible with a camera that does not have swings and tilts.

I originally started my web-site to discuss the transition from the opto-chemical to the digital darkroom. I started printing my Minox negatives because I reasoned that If I could make good prints from them, larger negatives would be a piece-of-cake. I was right. The object of all this for me is the final print, and from my point of view, the quality from a good 35mm negative can NEVER be equalled with an 8x11mm negative, ...or for that matter, a half-frame. AND 6x6cm is even better. And 4x5, etc. etc.

So, if we want a single "universal" camera, what is it? Is it 8x11 mm, half-frame, 110, full frame 35mm, 6x6cm, 4x5? Just kidding. I suspect that if one is to have only one camera it should be a 35mm. But which one?

Is anyone in touch with the current state of the market?

Forgive my digression from the Sub-World.

Don

Source: AOL

Resolution tests (1997-03-21T09:59:01)

> Don said he best can achieve 11 x 14 . Indicative that Minox
> lens's real resolution is less than 200 lpm.

Gosh. I didn't know what the resolving power of either the IIIs OR the film when I made the exposure on the Santa Monica pier.

<http://www.slonet.org/~dkrehbie/m1a.html>

I still don't know. I do have 16x20 prints made from Minox negatives (the Vought Corsair "Blue Max") in which the grain of the Tech Pan film is the most irritating factor.

I have a LOT of problems with the idea of lens testing. First, if I am correct in assuming that lenses, like film, test differently at various contrast levels, and that most "high-end" resolution figures are based on VERY high contrast (1:1000?), how do you achieve this contrast level at home? Does photographing a test chart with pure black and white, IN DIRECT SUNLIGHT, do the job? I am not technically oriented so I yield to the better informed here.

The only use I have found for lens testing is finding out at what apertures the lens is "out to lunch", and with my 35mm PC, how far I can shift at various apertures.

I have made the statement before that if sharpness becomes an issue of uncertainty with the viewer, it is not sharp enough. And I LOVE Stieglitz' work, and Alvin Langdon Coburn, and even Steichen. I accept the images for what they are, as I do with my friend's Polaroid image transfers, which are magnificent, ...and soft, by intent.

I can accept any camera for what it does, and if the Minox had a much softer lens, I would simply alter my vision. I should be so lucky as to have the vision of those listed above.

Don

Source: AOL

Printing Papers (1997-03-24T22:43:17)

I am just beginning to experiment with "warmtone" papers and am starting with Kodak Ektalure and Forte PolyWarm. My initial developers are Zone VI (my standard) and Edwal 106 - with and without selenium toning. Anyone with "warm-tone" experience out there? Anyone interested in the results? I AM using a Minox negative, so I can legitimately discuss it here. Right?

Don

Source: AOL

Re: 16mm film developing.

Minimum equipment required... (1997-03-25T21:48:14) I have a small refrigerator in the laundry (dark) room. I decant a 250ml bottle of rodinal into 25cc syringes which have little screw caps at the needle end, put them in a plastic bag, and store them in the refrigerator. It is easy to push 2.5cc (or 5cc) into a 5 cc pipette (which I use for a small graduate), recap the syringe and store it. I always rinse the pipette into the beaker with the sulfite solution. I don't know if the measures on the pipette include the liquid that sticks to the glass or not, BUT if I am consistent, it doesn't matter. the operant part here is the syringe as an airtight, variable volume, storage device, I think I am working on year-old Rodinal now and the mixed solution looks the same and the results are consistent.

Don

Source: AOL

Re: Film resolution (1997-03-26T10:08:42)

Does anyone know the dimensions of silver grain clumps in a 0.5 density negative, for ANY film. This morning I scanned a 16x20 print of an airplane nose, taken with High Contrast Copy film. It is VERY sharp. An area which amounts to a 1mm piece of the 11mm negative was scanned at the 600 ppi optical resolution (interpolation to "higher" values is pointless). With a loupe I can see sharp grains in the print which also appear in the scanned image - but not as sharply defined.

Fine details, clearly visible with a loupe in the print are less well defined in the scan, BUT the grain clumps are clearly visible. The amount of information available in the print is not limited by the resolution of either camera or enlarger, or the grain of the paper. It is limited by the grain size and pattern of the film.

I imported the 1mm section into MacDraw Pro and superimposed 100 easily spaced black lines, separated by white spaces of equal width. Detail in the image is finer than either the black lines OR the white spaces. This would lead me to believe that I have detail in the 16x20 print which is smaller than 1/200th of a millimeter. In fact, it appears that the loss of detail is due almost solely to the stippled appearance of the grain. In black areas where the grain is "fused" and adjacent to white areas where the grain is absent, the edges are absolutely sharp

It seems to me that the limiting factor in this print is the grain size in the negative, AND HCC film makes Tech Pan look like Tri-X. This leads me to conclude that the camera (regardless of lab analysis) has yet to be stressed by film technology..

Am I missing something?

Don

P.S. The frames on either side are less sharp. How many lost l/mm does the "shaky old" photographer contribute to all of this?

Source: AOL

Re: Digital Cameras (WAS:

Re: Fujicolor MC-007 camera (More on it, (1997-03-28T17:04:57) 1))

Peter Zimmerman wrote:

> Inkjet inks are anything but permanent.

Just wait! Things are a-happening.

George Lepp just told me about a new magazine called PC-Photo, a Warner publication (800) 537-4619. I gather it is going to be dedicated to non-silver output. I'll keep you posted.

> One may see an interesting system in which the neg (or slide) is scanned and
> manipulated in a computer and then the final image is written out to photo
paper
> and then developed.

It's here NOW!

Digital Light & Color Home Page
<http://www.dl-c.com>

> I think we'll see more of this within a year or two.

How about a month or two? Or, a week or two?

> I doubt I'll live long enough to see digital cameras have the spatial resolution
> of silver halide film. And I don't think I'll see mass storage devices able to
> handle 36 files that size (even allowing for compression)!

That is what I said about solid state computer memory.

Don

Source: AOL

Tape for attaching film, etc. (1997-04-22T13:14:08)

A while back there was a discussion about tape for attaching Minox film to the take-up spool. Since I have always just used Scotch tape cut to 1/3 width with scissors, and thought "someday I will find a better tape", you all motivated me to DO IT NOW!. I discovered, at the local art store, a tape called "White Artist's Tape". Bright white - acid free - flat surface - accepts ink and pencil - removes cleanly. It comes in various widths (I got 1/4") and either cuts or tears. 60 yards cost about \$2.50.

I attached 2 pieces of Minox film, end-to-end, with this tape and tried to pull them apart (tension) with no success. This tape really holds, but does pull off cleanly. Only time will tell how it ages, but none of my uses require more than 6 months.

Thank you all for motivating me to finally cross-out a 30 year-old project from my "To Do" list.

Don

Source: AOL

Re: Slitters (1997-04-28T18:52:39)

Allen R Garrard wrote:

>The width of Minox film is not 9.5 mm. Not 9.5 mm, not 9.4 mm, not 9.3 mm but 9.2075 mm Where in the world did they get 9.5 > mm???
Most of my slitters for the Minox type film cut from 9.1 to 9.2 mm.

Absolutely correct!

I have scanned factory loaded AgfaPan APX 25 with a Nikon LS-1000 at 2700 ppi. The edges of the film measured 990 pixels, which translates to 9.31mm. The image size on this film strip measured 850 pixels by 1170 pixels, which is 8x11mm, plus-or-minus a pixel, confirming the relative accuracy of the scan (assuming that the image size is really 8x11mm). There was a slight curl to the film which could have been eliminated with a Gepe mount, but was not.

Performing the same test with the "Minox" (Asanuma) film slitler yields strips 9.31mm (991 pixels) wide. My old Plexiglas slitler yields strips of 9.22mm (980 pixels) and I have had strips of 8.96mm work with a narrow margin on one side of the image. 8.75mm is probably a theoretical minimum. This does provide a significant margin when building one's own slitler.

Don

Source: AOL

Agfa Copex Pan AHU (1997-04-28T21:52:03)

ME TOO! I used Kodak's High Contrast Copy Film when it was available and still curse Kodak for "replacing" it with Tech Pan. I can slit 35mm if that is available. When you say "rolls" do you mean regular 35mm cassettes, or 100 foot rolls?

Is Agfa Copex Pan AHU a REALLY fine grain - high resolution film? High contrast?

Don

Source: AOL

Re: XP-2 Film Scan (1997-05-15T14:01:02)

John Brubaker wrote:

> ... you can view an 8 1/2mm x 11mm section
cropped from a Minolta 16 neg. shot on XP-2 film.

I just downloaded your Dodge truck, tweaked it with Photoshop, and printed an 8x10 (121ppi) on glossy paper with the Epson. The tonality is marvelous, detail in the grille sharp. At arm's length, it looks

good! It shows a mild, but tight, granularity which is about the same result I got by the same process AND from scanning a Minox negative. It is SUPER film. Now the question is, how does it compare, side-by-side with the other ASA 400 film/developer combinations. I plan to use it for my high speed B&W work.

In addition, it seems to me that you have a good testimonial for the Minolta 16 here also.

Congratulations on your new "venue" .. I just read an article and we are now calling web-sites "venues". Oh, my! Yours looks to be off to a good start, - they are really fun. You get to do exactly what YOU want to do. How many places can you do that?

Before you get too frustrated, try Claris Home Page. I think you can download a trial. I wrote most of mine in pure native HTML code, then tried everything I could download, then Microsoft Internet Assistants, and then found Home Page. It takes all the fun (read challenge) out of it.

Don

Source: AOL

Re: Minocolor (1997-05-18T17:45:40)

I have been led to believe that the new Minocolor PRO 100 Film is Fuji NEW Reala. Be careful, the NEW Reala has a grain size approximately 1/3 the size of the older Reala. It is super film for the Minox, and beautifully processed and printed by MPL.

Don

Source: AOL

Re: Minocolor (1997-05-18T19:53:20)

Robert G. Parks wrote:

> Why do you say to be careful? I would think the smaller grain size would
> be a definite advantage in the Minox.

Recently I tried to find NEW Reala in San Luis Obispo, California. The

bar-code (UPC code?) on the Fuji Super HGV 200 available all over town is - 4 902520 111913. Fuji's response was that the UPC code (and the name) indicated it is a gray market product intended for Australia. There is nothing they can do to prevent people from selling products imported from another country - it's not illegal! The only thing is to educate the public about it. If you want made for USA product, the proper code is 74101!

So - to set things right, they sent me two rolls of - you guessed it - Reala. After my e-mail of Thursday I got an apology and the promise of NEW Reala. They also sent me a "20 pound pack" of literature with a "glossy" about NEW Reala, in which the 1/3 grain size was mentioned. There IS a difference and you need to be careful to (1) get US film, and (2) get the NEW reala.

I must add that the People at Fuji were VERY helpful and my impression was very positive. Since most of the camera shops in town do not have enough volume to deal directly with Fuji (or Eastman, or Ilford, or ...) they must deal with "distributors". I have turned the literature over to them. The plight of the small business person in this age is not pleasant.

Don

Source: AOL

Re: Minox Notes (1997-05-20T17:11:19)

Peter Zimmerman wrote:

> Sure, Carl. I use it all the time to note on the back of the camera what film I
> have loaded.

Doesn't everybody? I write all over the smooth part with a fine-line Sharpie permanent marker, and wipe it off with a Q-Tip (or Kleenex) and alcohol. It is great for noting any special development requirements, like N+1. I use 1/4 inch "Artists Tape" (the same I use to attach the film to the takeup spool) on the black LX. It even works on Nikons.

Don

Source: AOL

Re: Micro film vs. Normal films (1997-05-23T08:55:41)

Allen R Garrard wrote:

> I have used several of the Kodak and one of the Fuji micro films and
> even have a roll or two of the old Kodak Recordak frozen. The Recordak
> in my estimation was a very good film. Comments ???

I used Kodak High Contrast Copy Film (5069)

<http://www.slonet.org/~dkrehbie/m1a.html>

during the '60s and '70s when it was popular as a means of getting "4x5 quality" with 35mm (if you believe this, I have a bridge to sell).

There were a variety of developers touted as able to achieve "normal" contrast range with this film which had, as do all super fine-grained films, a rather severe shoulder. POTA, Perfection, H&W, each had devotees and to some degree achieved printable negatives. Pete has mentioned H&W film which was available with H&W developer and achieved good results.

In the mid 70s, Kodak replaced High Contrast Copy Film, and "Solar Flare Patrol Film", with Tech Pan. Inclusion of the solar flare function is what led Kodak to enhance the red sensitivity of the dual purpose replacement.

The abandonment of 5069 and introduction of Tech Pan led to a steady stream of articles on the development thereof. POTA was the route taken by Kodak. Within a year someone (I wish I could give credit) had discovered dilute Rodinal with sodium sulfite worked well.

Special Tech Pan developer and POTA are available from the PHOTOGRAPHER'S FORMULARY,
<http://www.montana.com/formulary/form.html>

I will be trying the Agfa Copex shortly and am interested in whether anyone else had experience with 5069 and its similarity with other currently available films. Anyone remember "Perfection" developer and what was in it?

Don

Source: AOL

Re: Tech Pan/Rodinal/Sodium Sulfite (1997-05-30T08:06:53)

> >I have developed several rolls of Tech Pan rated at 75
>
> Interesting that you can rate at EI 75; I use 40 or 50 and Don Krehbiel uses
> 25. One's metering technique really does matter in this matter!

REALLY interesting! Yesterday I "tripod-ed" the Nikon and 55mm Micro Nikkor and went to Morro Bay to shoot fishing boats in the distance with a variety of films. The Tech Pan was exposed with the camera setting of ASA 25 and whatever metering pattern they built in at the factory. This turned out to be the equivalent of using the "f/16 Rule". The frame which first showed ANY density in the shadows was 2 stops over exposed, or the equivalent of using an auto-exposure camera at an ASA of 6!

"Expose for the shadows, develop for the highlights." The "f/16 Rule" setting meant that anything below EV 10 appears clear in the negative while the shadows were really or below EV 10 (probably true).

To assess film speed you must know how much exposure produces a barely printable density in the negative (0.1 density above film base plus fog). If our meters were all calibrated at EV 10 = 10 candles per square foot, and our cameras were all accurate, our ASA assessments would be equal.

Don

Source: AOL

Re: Tech Pan/Rodinal/Sodium Sulfite (1997-05-30T13:48:34)

Peter Zimmerman wrote:

> EV10 = 10 candles/ft**2 must be for a specific EI. Do you know what it is?

The EV scale (my Pentax meter) spans values from 1 to 19 and represents luminance values between (according to the manual) 0.026 and 6,820 candles per square foot. The c/sq.ft. value for EV 10 is given, in the manual, as 13.3. Actually this is the "padding" that is usually included in many meters wherein a c/sq.ft. value of 13.3 gives a reading of 10 instead of 10.3. The photographer is "conned" into giving 1/3 stop extra exposure. Good for B&W. Bad for color reversal! Ever

expose Kodachrome at ASA 80?

> Also, the results you gave showed that the contrast of TechPan remains quite
> high, despite the dilute developer.

Actually, I like my Tech Pan negatives to have a Zone VIII density of between 1.2 and 1.3 which is a CI of about 0.5 to 0.55. This batch was developed at 24.5 deg. C (we are having a heat wave) and I under developed a bit. The AgfaPan 25 I developed at the same time (according to Agfa directions for CI 5.5) has more contrast.

Don

Source: AOL

Re: Tech Pan/Rodinal/Sodium Sulfite (1997-05-30T15:19:00)

Joe McGloin wrote:

> I normally expose Tech Pan at ISO 2 and develop in split D-76, so this is no
> surprise to me!

All of this has to do with the depth of the shadows and the detail desired therein. It is a strong argument for the old rule, "Expose for the shadows, develop for the highlights."

With B&W, it is frequently required that one give 4 stops more exposure than a "gray-card" reading would suggest, as illustrated at -

<http://www.slonet.org/~dkrehbie/dkspeed.htm>

Don

Source: AOL

Re: Agfa Copex Field Test (1997-06-10T15:29:34)

I have tried to summarize the results of the initial attempt with Copex at -

<http://www.slonet.org/~dkrehbie/copex.html>

I have an 8x10 in front of me that can easily, except for tonal range, pass for a 35mm Tech Pan print. This reminds me of the old Kodak 5069 High contrast Copy film that I loved so much. My guess is that the curve can be tamed a bit more to produce a tonal range through 6-7 stops. Does anyone know what was in the old "Perfection" or "H&W Control" developers. Pete?

My guess is a true ASA 6-10, but in most situations will work with auto-exposure set at ASA 25. I am hesitant to describe it as a "6 stop" film without further testing, BUT I have never had much luck altering the basic characteristic of any low speed, high contrast film. This is certainly the best stuff I have seen lately and will cause me to abandon Tech Pan (which was never anything but a bad substitute for 5069 anyway) for Minox work.

Thank you Mr. Parks for making my day! week, month, year ...

Now to get out the POTA!

Don

Source: AOL

Re: Agfa Copex Field Test (1997-06-10T21:30:35)

John Brubaker wrote:

> P.S. - What is "POTA" that you referred to?

It is a VERY slow working developer used for continuous tone with the old high contrast, super fine grain films. Actually, I think Pete said that Technidol is POTA. I am sure Pete knows a lot more than I about these (and H&W) developers. The best developer I found in the '60s was called "Perfection". It did wonders with 5069. I have a bunch of Technidol solid that I will try this week. Actually Technidol liquid straightens out the shoulder on Tech Pan, while taking about a stop out of the toe. ...FOR ME

Don

Source: AOL

Re: Friday the 13th. (1997-06-14T07:45:33)

Thanks for the good wishes, John

Actually Friday the 13ths are my best days, so you can't scare me. I am impressed with two things. 1) the quality of the film, and 2) your skill at preparing it for presentation. Having done a bit of this myself, I can appreciate the manipulation you did. Not underdone or overdone. Very nice!

Don

Source: AOL

Re: Agfa Copex Field Test (1997-06-14T12:05:09)

I hope nobody looked at the latest "Fishing Boat" image and description this morning at -

<http://www.slonet.org/~dkrehbie/copex.htm>

I had misread the negative strip and switched the two automatic exposures. I am learning something about my LX and the difference in shutter speeds between cameras. I have always tested film with my Nikon because, 1) I have more than 12 exposures, 2) it costs less, and 3) I can better control the exposure of the individual frames. My result for Tech Pan and MY Rodinal processing has ALWAYS yielded a Zone I density of 0.1 above fb+f for ASA 25. The Minox LX test yesterday, which yielded ASA 6-10 for Copex, also yielded a value for Tech Pan in the region of ASA 100. More later on this saga, when I figure out what is going on.

Don

Source: AOL

Minox negative sharpness (1997-06-17T11:39:11)

I have had this problem for years, and lived with it. On the same roll, one image will be critically sharp and its neighbor, not. I have attributed it to accidentally moving the focus knob, or moving, or the

little guy inside the camera who moves things after I set them. It happens with IIIs, B, C, and LX models. It is generally evident only with high resolution films and greater enlargements. It is amazing how much faulty equipment and bad technique can be hidden with Tri-X.

Yesterday I exposed 1 roll of Tech Pan and 1 roll of Copex at Morro Bay. The object was to capture fishing boats at varying distances, since their masts and rigging make excellent resolution tests. The LX was mounted on a Tilt-all tripod (REALLY looks silly) with the camera set at infinity. I do not have a cable release attachment for the LX, so I can't claim a perfect environment, BUT the Tripod is quite sturdy. The Tech Pan exposures are critically sharp at a 16x20 inch print size. The Copex frames are soft, the grain is tack sharp, the edges are not. It is NOT the film. It IS the camera. Same camera, same tripod, same wind velocity, same photographer, ...WHY? My guess is that in the process I forgot to check the focussing knob each time and de-focussed the camera when loading the Copex, which was the second roll.

Anyway, Michael, I just wanted you to know that you are not alone! I am going tomorrow to recreate yesterday's episode with a special lookout for the little guy who moves my focussing knob. More after that.

Don

Source: AOL

Re: copex rapid (1997-06-20T08:31:48)

Peter Zimmerman wrote:

> But the tank matters.

BOY DOES IT EVER! Since I don't have Copex in 35mm, I am having to run the film-speed-tests with the LX. This means 250cc for a Minox neg. strip vs 500cc for a 35mm. The Tech Pan curve is quite different! The toes and shoulders are in the same place, but the shape is different. Dilution and agitation are identical. Gotta figure this out. I suspect at this point that the volume of developer is nearly as important as the dilution. It certainly makes sense since bromides quickly alter the composition of the solution.

Don

Source: AOL

Agfa Copex (1997-06-26T17:05:52)

Just posted the enlarged portion including the tugboat at about 100x.

<http://www.slonet.org/~dkrehbie/f6tcpx4.htm>

There is grain, but who is going to make 32x43 inch enlargements from Minox negatives. I think the endless arguments about the resolving power of the Minox

are interesting from an academic perspective - BUT the Minox is certainly NOT a limiting factor in image quality, and Copex, as good as it is, is not close to pushing the Minox envelop. I really do appreciate Bob Park's getting me into this and will probably replace Tech Pan with Copex - it has a nicer "feel" - to say nothing about the spectral response.

More later.

Don

Source: AOL

Re: Agfa Copex (1997-06-26T21:34:40)

This will be my last message to the public list regarding Agfa Copex. Anyone wishing to discuss this film may contact me directly and we can compare notes. I will try to explain my position regarding the Minox camera and its place as a photographic instrument.

The first lines written for my web venue, over a year ago, were an attempt to put the various camera formats in perspective.

Fine-Art photography has been justifiably dominated by "large-format" cameras, first by necessity, then by preference. Given the time and conditions to set-up a 4x5 or 8x10 camera, and the ability of the photographer to exploit it, the images can have a quality not possible with smaller formats. While the large negative size captures more data

and needs less enlargement, it does require longer lenses which magnify camera movement and reduce depth of field. Faster film (or a tripod) is required to control the former, and smaller apertures, the latter.

It is my view that prints must give no clue as to their origin, and must exhibit with fine prints from larger formats, being viewed from distances between 10 inches and 3 feet. I generally limit Minox prints to 6x8 inches, 35mm to 11x14, and 6x6cm to 16x20. Larger prints are often successful depending on the subject matter. EACH negative has an enlargement factor at which it begins to "fall apart". If, as Martin stated, the ^ÓLeica Masters^Ô seemed to find their limit at 16x20 inches, and I certainly agree, then the Minox with the best of film should be limited to 5.3 x 6.6 inches. I have, for years, heard the "old saw" about larger prints being viewed from greater distances, but have rarely seen gallery visitors move very far back to view larger prints. Sooner or later they will move in close.

I just think it is fun to test the limits and experiment. I think it is wonderful that I can read the name on the back of the tug boat. I also have no problem seeing the grain which, according to my standards, will limit this negative to a 6x8 inch print. I really don't care about the lines per millimeter, or RMS Granularity, if I can see the limits of the camera/film/developer combination in a real print.

I don^Òt yet know how Agfa Copex compares with Tech Pan, but curiosity is as much a curse as a virtue, and will probably win. My subjective view at this point is that Copex is a 'pretty' film.

Don

Source: AOL

Re: Radio silence... (1997-07-22T16:43:58)

Michael Goldfarb wrote:

> Don - how are those b/w film tests coming?

The film tests are done. The prints are made. The negatives have been scanned. And what do I know?

1) IMHO, color film makes lousy black & white prints.

- 2) Slower film is finer grained.
- 3) Slower film is more contrasty.
- 4) Developer selection makes a BIG difference with black & white negatives.
- 5) A lot of things, other than the emulsion, can affect negative sharpness, acutance, resolving power, etc.

GOSH, No kidding?

I will post the data and examples next month when our SLONET storage quota doubles. The problem is that when looking at extreme enlargements, one loses perspective. I think my new approach will be to gradually increase the enlargement factor until I don't like the results and establish a maximum enlargement factor for each film. But then another factor appears. An image with lots of subtle texture like a foggy day at the beach can be enlarged much less than a strong, dramatic image with lots of very light and very dark texture.

I was quite surprised that the T-Max 100, which was professionally developed by a local master, displayed about the same grain as the AgfaPan 25 which I developed in Rodinal with sulfite. The AgfaPan 25 does have more information and, in my view, more "personality".

More later -

Don

Source: AOL

soduim sulfite (1997-07-26T09:02:30)

James Hewitt wrote -

What does the sulfite/developer combination do?

Hi James -

I have found that when plotting film curves, the addition of sodium sulfite (to Rodinal)"fills in" the toe of the curve. That is, the response of the film rises more abruptly from film-base-plus-fog to 0.1 density. I usually get an almost straight rise from zero to Zone III with the addition of sulfite to Rodinal, whereas without, the rise is more concave. This means to me that I am getting better shadow

separation. The point at which density first appears in the negative (and the density at Zone V) is still the same, it's just that I get to 0.1 above fb+f faster. I guess technically this means (since the 0.1 test is the indicator of film speed) that my results show higher film speed WITH sulfite than without.

About "sharpness". The sharpness obtained with highly dilute Rodinal and sulfite is largely due to the "edge effect" resulting from developer exhaustion along edges, when using VERY limited agitation. The "Mackie Lines" (not spelled correctly and Pete can describe the phenomenon better than I) cause an increased perception of sharpness, in fact, where black meets white the result CAN be disturbing in very great enlargements.

Like Fred Picker always said, TRY IT! your results will never be the same as mine, and you might (probably will) discover an improved technique.

Don

Source: AOL

Re: contact sheets (1997-08-10T12:56:39)

I have 2 pieces of 1/16 inch Plexiglas, properly masked, between which I can carefully place three strips of Minox film. I cut 8x10 inch paper in half and, using my 55mm enlarging lens, I can get 3 frames in the 8 inch width and 3 rows (the 3 strips) in the 5 inch height. I therefore get 9 1 5/8 x 2 1/8 inch enlargements on each half-sheet of paper. I use the Plexiglas sandwich as the negative carrier and merely slide the entire mess for each new exposure. A 36 exposure roll, cut into three 12 exposure lengths is "proofed" on 2 pieces of 8x10 paper (4 half-pieces) and each image is big enough to judge.

I must admit that it is a "pain" and I now scan the negatives and print 3x4 inch prints, several to the page, on Epson paper. The upside is that I can perform some manipulation at the start and decide if the neg is even worth further study.

I heartily agree with Godfrey that 2700 ppi is more than adequate for proofing and web-site images from Minox negatives.

Don

Source: AOL

Re: PVCs and image quality (1997-08-27T18:46:18) James Donald Hewitt wrote:

**> My question is, will this PVC pipe shorten the life of my negatives by
> adding trace amounts of PVC to the surface of the negative during the
> development process?**

Oh my, I hope not! I have been developing my 35mm and 6x6cm in PVC pipe for years. Any chemists in the group?

Don

Source: AOL

Re: Good news, bad news! (1997-09-30T07:58:03)

Bill Hoy wrote:

**> 3. Has anybody worked out a rule-of-thumb exposure guide like the sunny
16
> rule but based on the minox 3.5 aperture? I'm pretty good at guessing
> exposure with sunny 16, but in the field I always lose count when I try to
> back down to 3.5.**

Welcome Bill!

As is the norm with this group, you are getting good advice. I can only add a bit. The "f/16 Rule" appears to be based on a middle-gray (ZoneV) luminance reading of EV 15 (plus or minus the "k-factor" of your meter). If you translate that to an "f/3.5 Rule", you have 4 1/3 stops more light which requires ABOUT 1/20th the exposure. Thus ASA 25 film could be exposed at roughly 1/500th sec.

MY "Minox f/16 Rule" is "20x the film ASA, then adjust downward depending on shadow detail desired." At 20x, the negative will be clear for anything below EV 12!

One needs to be alert to the “tricks” exposure meter people play on us mortals by “adjusting” the readings to bias toward over-exposure. It is called a “k-factor” and is usually listed in the manual. It is 1/3 stop on my Pentax Digital and is one reason I use Kodachrome at ASA 80 instead of 64.

All that said, I usually set my IIs at 1/200 when in bright daylight with Tech Pan, (1) to get better shadow penetration, and (2) because I think my shutter speeds are not accurate. This is the perfect place to do your own experimenting. I do know that the LX, in auto mode, makes perfect Tech Pan exposures when set at ASA 25.

I would suggest destroying 1 roll of each type of film you plan to use, in YOUR camera, with YOUR meter, and YOUR processing, to establish YOUR norms.

Don

<http://www.slonet.org/~dkrehbie/>

Source: AOL

f/16 rule for the Minox (1997-09-30T21:20:36)

I did a piece for Don Thayer in which I tried to illuminate the origin of the f/stop sequence.

<http://www.minoxlab.com/dk051597/dkexp.htm>

It is geometric, not arithmetic, and as such the f/stop values defy arithmetic operations like division. The intermediate point between f/2 and f/4, for example, is not f/2.8, but 2.83. The point 2/3 of the way from f/2.83 to f.4 is f/3.56, not 3.5

I have no idea if the manufacturers create their lens stops (or lenses) to the actual 1/3 stop intervals or if, for example, the Minox is actually f/3.50.

At any rate, to do arithmetic, one must construct the series in which the interval is arithmetic by finding the log(base 2) of the square of the f/stop. This is a horrible experience without a spreadsheet and trivial with it. This done, one can see that the arithmetic source of f/3.5 (actual) is 3.61 (not 3 2/3,

or 1/3 stop less than f/4). Thus f/3.50 is 4.39 stops larger than f/16 and permits 20.8 plus times the light to enter.

My spreadsheet calculation indicates that, applying the f/16 rule for ASA 25 film, an f/16 aperture would require 1/25 sec. whereas the setting would be 1/522 for an f/3.50 lens and 1/504 for an f/3.56 lens. Thus, about 20 times the ASA. My preference is for one stop more exposure and I use an f/11 rule for larger formats and 100 times the ASA for the shutter speed with the Minox.

So what? Well, a half a stop can make a difference with chromes and with Tech Pan and Copex. Certainly camera apertures and shutter speeds, meters, and film emulsions, provide varying degrees of precision. What matters is that once one's own personal procedures and standards are established, 1/2 stop can make or break an exposure. Miscalculating 1/3 stop on film speed AND 1/3 stop on exposure can either cancel the errors, or worse, add them.

Don

Source: AOL

Re: Seibert was a genius! (1997-10-11T19:00:45)

Peter Zimmerman wrote:

> After months of debating whether I should risk my Minox II out of doors ..
> ..In all my years of Minoxing I have _never_ seen a sharper Minox lens.

I'll betcha it has something to do with precise film registration.

Don

Source: AOL

Re: Seibert was a genius! (1997-10-11T20:37:42)

> ps if you want to post a scan, be my guest.

You have probably verified the suspicion I have harbored for some time, that the film registration is critical. Martin quantified it, but spent some time

wondering why one neg was tack sharp and the next not. I first noticed it with HCC film in 35mm and just recently with Copex vs. Tech Pan in the LX. It explains why tech Pan (very thin) is sharper in the IIIs than in the C or LX. Better do an article on the subject!

You should run a load of Copex for identical scenes with each of the basic designs, II, IIIs, and LX, on a sandbag to confirm this. It would be interesting to see the same test with Tech Pan to see if the differences were "different". I can supply you the Copex and Tech Pan loads if you decide you have the time and want to try.

Don

Source: AOL

Re: SUBMINI-L Digest - 10 Oct 1997 to 11 Oct 1997 (1997-10-12T08:45:59)

Paul Rubin wrote:

> I guess I'll have to start taking this extended washing stuff
> more seriously.

There are 2 problems which can kill a print and RC paper only eases one of them.

First, you must get the unused silver halides OUT and exhausted fixer will not do this.

The time of fixing has nothing to do with the type of paper, but is dependent on -

- 1) whether you use sodium thiosulfate (hypo) or ammonium thiosulfate (found in "rapid" fixers and, incidentally, Kodak Rapid Selenium Toner), and
- 2) whether there is hardener (acid) included, and
- 3) strength of the fixer, and
- 4) the emulsion Kodak Elite takes a lot more fixing in my estimation.

Ilford recommends, and has made a good case for, using a "film strength" non-hardening fixer for a relatively short time. It works. But remember that the two bath "hypo" fixing system has been around a long time and emulsions have not changed that much.

The second problem is the one that RC paper eases and that is getting the junk

out of the paper (washing). Ilford's "rapid" fixing system will work on both RC and fiber papers, BUT only if you use the proper fixers and time. A "hypo clearing agent" or "washing aid" will help.

BUT, you will NEVER know unless you make some tests of your own. My copy of the Kodak Darkroom Dataguide, 1977, describes Kodak ST-1 residual silver test, and HT-2 hypo test solutions, both of which are available from the Photographer's Formulary although I would recommend the Rapid Selenium toner alternative to the ST-1, since sodium sulfide (NOT sulfITE) is terrible stuff.

You might even get a clue at this late date with these tests.

Michael, HELP!.

> We've had plenty of water here in northern CA for the past...

I guess we have plenty here also on the central California coast, they're building houses and planting vineyards at an alarming rate. I think most of it is that we now are able to steal water from you (northern CA) and that is a good excuse for more development. Better be ready for digital photography! The next draught is going to be ugly. Or, of course, we could always dam Yosemite Valley.

Don

Source: AOL

Re: curved film plane (1997-10-16T19:53:50)

I just can't resist jumping on this.

The discussion of curved or flat film gates, resolving power, and sharpness IS purely academic, right? I can't imagine better optics than in my 1950s IIIa or LX in view of the fact that in every case of image degradation, the photographer (me) was the FIRST thing that failed, followed closely by the film. I have yet to consistently push the optical limits of either camera. If a Minox makes fuzzy negatives, it needs fixing!

Don

Source: AOL

Re: Minox Lab (1997-10-18T15:11:05)

Peter Zimmerman wrote:

**> It takes me longer to get film to and from (MPL) than it does Don Krehbiel
> on the west coast.**

Only when they forget to feed the horses!

Don

Source: AOL

Re: Don't sue him, Don! (1997-10-21T17:40:58)

Unfortunately not everyone will have the delightful opportunity to wander around the wilderness with Godfrey. He stops at places I walk right by and spots images with apparent ease. He has a keen eye and the technical skill to exploit it. Fun guy, too!

The tripod is an old '30s type that often accompanied early Leicas, and was present because of fog and Copex. It really helps with ASA 6 film, but obviously is a bit awkward. How did we ever get all of those marvelous slides with ASA 10 Kodachrome? Ah, youth?

Don

Source: AOL

Re: 16mm film and cassettes (1997-10-26T08:29:50) B

ogdan KARASEK wrote:

**> >-----
> >9. The B&W micro-film
> >NM-1 35 mm negative R 315 line/mm
> >PM-1 35 mm positive R 350 line/mm
> >-----**

VERY interesting. Often these films have unique personalities which make

delightful images. Adox KB14 was an example. How might one pursue the availability of this particular film?

Don

Source: AOL

bar-coding mail (1997-10-27T13:03:46)

The recent discussion of mail speed and bar-coding the zip code caused me contact our local Postal Service consultant and was informed of the following:

- 1) Bar-coding is only used for letter size mail, packages and larger mail is not scanned.**
- 2) For the mail to be scanned, a FIM code must be printed just to the left of the stamp. The initial screening separates out the letters with the FIM code for bar-code scanning. All the rest go to normal processing whether they have a bar-code or not.**
- 3) Most current word processors have an option to print the FIM code and bar-code when printing envelopes.**

Sorry, this apparently is not an option for sending and receiving film and prints to/from MPL.

Don

Source: AOL

Re: Anniversary photo contest (1997-11-20T16:41:09)

I have never been asked what camera or printing paper I used. We went through this argument a couple of years ago when someone wanted to exclude images which had ANY "digital ancestry". The fact is that the "Best of Show" the year before had been a silver print made from a negative made with a film recorder, - and no one knew it! We now have a "Don't ask, don't tell" policy, the only restriction (because we are indeed a photographic society) is that the image originated photographically. A print is a print! An image is an image! "Look what I did with this little camera." is fun for the discussion group, but irrelevant in the gallery.

I think it is a neat idea, but since none of us will ever see the actual prints (digital or photographic). In the spirit of KISS, I would opt for 72ppi on the internet. Joe, Godfrey, and a local artist, Steve Lunsford (<http://www.sjlimages.com/>) have shown that quality images can be recognized at the end of telephone lines. I would favor an option with images submitted to Joe (sorry Joe) for the SUB CLUB Gallery (a worthy endeavor anyway) and at the end of each year, have the membership vote.

The 72ppi format does reduce all to a common format as can be seen in the images at Steve Lunsford's site above. Most of the photographers who are exhibited at his gallery use 4x5 or larger formats, but you can see that it is the concept and execution that counts, and this can be successfully communicated. I had a print request from an internet visitor based on one of the images in my gallery. When I got ready to make his print, I realized that the tonality of the "cyber" image was more pleasing than any silver print I had made (indeed the print I had used for the scan). I was then faced with making a silver print in the opto-chemical darkroom to match the 72ppi image in the cyber gallery. The final silver print WAS better!

I have always maintained that if I couldn't make good prints with a Minox, there was no sense having a 4x5. I have modified that to read "If the image doesn't look good at 72ppi on the screen, It won't look good on a 16x20 platinum print!".

Don

Source: AOL

Re: minox film advance (1997-12-14T08:07:45)

Godfrey DiGiorgi wrote:

- > The C, then BL and all later models have the revised film advance
- > that only transports after the shutter is fired.

USUALLY!

Don

Source: AOL

C-41 developing (1997-12-15T13:25:15)

Peter Zimmerman wrote: ...or find a Minilab that will do it (C-41) routinely

I have recently had good luck with C-41 Minox film at our local WIZ 1-hour lab.

I

remove it from the Minox cassette and attach it to the spindle of a 35mm "Snap-Cap" reloadable 35mm cartridge, winding it onto the spindle, then inserting it into the cassette and attaching the cap. I leave about 1 inch protruding for them to attach to their "device". The first roll was physically damaged, we think from flopping around in the machine, but the last 6-7 have been quite good. They charge me the usual, \$3.75 and I get them back in 20-30 min. Because the film is not stabilized while going through their machine, I would not trust this technique for precious images - rather sending them to MPL which does a consistently superior job. But for just dinking around, it is very convenient.

Don

Source: AOL

Re: Delta vs. TMax (1997-12-16T21:39:47)

Michael Goldfarb wrote:

> What about TMax 100?

When T-Max was first introduced, I slit some and tried it, in the IIIs, along with a roll of Tech Pan. I was pleasantly surprised in that the grain and image detail were quite good. I probably developed it in Rodinal (what else). Recently, I have been trying various films and the T-Max that our local B&W Guru developed in D-76 1:1 with nitrogen burst agitation was spectacular - grain VERY fine (APX 25 like). He, however, prefers APX 100 for his work, and uses T-Max 400 for increased speed. The developer and development scheme (dilution, wet-time, temperature, agitation, etc.) are so important that it is hard to pick one over the others. I have had good luck with T-Max 100, Ilford 100 Delta Pro, and AgfaPan APX 100 - all developed in Rodinal (with sodium sulfite). There are variations from roll to roll which can only be attributed to summer vs. winter, my anxiety level, the anxiety level of the film and/or developer, and/or the phase of

the moon.

My guess is that it doesn't matter which film you use as long as you stay with it long enough to develop a bond, and the film allows you to express your vision.. The result of my extensive film tests over the past year (driven largely by the discussions of this group) is that the difference in negative quality due to the film itself is far less significant than the differences caused by processing variability and inconsistencies during exposure.

So, only you can decide if a given film is good, for you. All of the current crop of films are of exceptional quality, and can most easily be tested in 35mm format.

Don

Source: AOL

Re: Agfapan uses new tech? (1997-12-17T07:02:26)

Michael Goldfarb found the Silverprint company (<http://www.silverprint.co.uk/index.html>), which states that APX25 and APX100 were "recently" improved to use T-grain. Are you aware of any changes in the emulsion lately or is this the change to "APX" that we already know about?

These companies seem to be very secretive about changes - I had a heck of a time finding "NEW" Reala and still find most people don't know the difference.

I saw the The Minox "Always Ready" Stamped Steel Sign. That's neat and would be perfect to include when showing Minox prints. Do a bit of advertising!

Don

Source: AOL

Re: Questions from a novice (1997-12-23T08:44:14)

Mark wrote:

> After 25 years of slides, print film is a real revelation.

It is really exciting to welcome you to the "III's Society". It is my favorite camera of all time. Mine is NOT a good transparency machine without a good exposure meter and some serious experimentation because my shutter speeds are not all that accurate. If you are used to 35mm Kodachrome with a good (My cousin once asked why I was projecting Leica slides with a Kodak projector - I no longer am) projector, Minox slides will be disappointing. Indeed, my experiments have indicated that slide film (even Kodachrome 25) did not provide superior scans at 2700 ppi than color negative films.

> What seems to be the lower limit on hand held speeds?

Michael is right (as usual) in that it is a function of the individual. I have a sharp Kodachrome (ASA 10) of two gentlemen entering the Munchner Hofbrau, hand held at 1 second. The secret, I have always believed, is that I was leaving after a couple of hours of good conversation (and was 25 years old).

If you experiment to determine your threshold (which will vary with the film resolving power) be sure to include a tripoded frame for comparison.

> My prints exhibit a noticeable amount of grain whenever there are large
> expanses of monolithic color - a cloudless blue sky for example.

NEVER, NEVER, NEVER include expanses of "nothing" in a Minox image which is to be enlarged to a greater degree than would a 35mm negative. The same rules apply, the difference is that you will have a print 1/3 the size of that from a 35mm negative. There are indeed some "rules" for successful Minox photography.

> I have one print with what I can only describe as a series of faint
> rainbow streaks across the lower half of the print.

Interesting! I have only recently discovered the same thing, I think, largely because I have probably never pointed the camera at the sun before. Is this
<http://www.slonet.org/~dkrehbie/2photo/negative/filmtest/copex/cpx2.htm>
the effect you have?

> Is there anything else I should know about controlling grain with color
> print film?

With the B&W chromogenic films, over exposure reduces the grain effect. Is this also true with color?

> Thanks for taking the time to read the ramblings of a novice.

Mark, we are all novices with the Minox, that's what makes this group so much fun.

Source: AOL

Re: In which I try TechPan for the first time (1997-12-23T12:09:56)

Joel Moskowitz wrote:

> I agitated for the first 40 seconds because I wasn't sure if I was
> supposed to or not. My guess now is not.

I must go back and "tweak" my instructions. I usually do NOT agitate at all after pouring in the developer, on the assumption that pouring in the developer IS "agitation". This only works for me with the film wound around a drum (Minox tank like) where there are no channels through which the developer "squirts". I have NEVER been able to develop 35mm TP this way with the "normal" Nikor spiral reel - ALWAYS getting sprocket-hole distortion in dark AA type skies.

Don

Source: AOL

Re: In which I try TechPan for the first time (1997-12-27T14:46:16)

Bill Hoy wrote:

> Greetings. This observation may not be germane, because I haven't done any
> tech pan for years. But as per agitation technique, the best method I've
> found for conventional films (usually 120 agfapan 100), is to use a tank at

> least twice the size needed for the number of reels you plan to develop.
> Fill the extra space with empty reels, placing the film at the bottom of the
> tank. Pour in just enough developer to cover the film, then simply invert
> at the tank at the specified interval, draining the developer completely
> from the film. After five seconds, reinvert the tank, reimmersing the film.
> I don't know about tech pan, but with conventional films, this produces the
> smoothest and most consistent development I've seen. I tested it using Zone
> system exposures of blank walls (or whatever) and there little evidence of
> swirls, or differences in edge density. All other techniques showed evidence
> of inconsitensy of development, especially at the film edges. This technique
> produces skies that are smooth as silk with conventional films in
> conventional sizes and I have used it for years. I've always heard that
> tech pan is finicky regarding agitation, and I haven't tested it since the
> early 80s when it was first touted as the "large format" 35 mm film, so I
> can't vouch for it with this film.

WOW ! IT WORKS! Thanks Bill. I just tried your technique with a roll of Tech Pan, 1:100 Rodinal/sodium sulfite, one inversion per minute, six minutes at 68

deg. C. I see no sprocket hole damage and the frames all look evenly developed. I still need to do a serious test roll to plot the curve and check the shoulder, but

the elephant seals on the beach at San Simeon sure look good. I have used Kodak's "up 'n down" agitation with Technidol AND Rodinal, golf tubes, and now have a special "Minox-tank-like" drum/tank which gives me perfect results. BUT the golf-tube and drum make fixing and washing more complex. Your technique will make 35mm processing MUCH simpler, allowing me to go back to the conventional spiral reel. More later as the experiments continue. I will definitely pursue this.

Your comment "This observation may not be germaine" is without merit in a field where EVERY observation has value. Your contribution to my technique is highly significant. Thanks again.

Don

Source: AOL

Re: In which I try TechPan for the first time (1997-12-27T21:10:59)

Roger Beamon wrote:

**> ... that if the surface of the film was wetted uniformly upon first
> introducing the developer**

I forgot to mention that I ALWAYS pre-soak the film for 1.5 - 2 minutes. I don't know where I got the idea that it was advantageous, but it has been with me for years - It does (I think) insure a more even coating of developer and reduces the possibility of bubbles. It is interesting that Ilford specifically recommends NOT pre-soaking the Delta Pro films because of a component in the emulsion which is thereby removed.

Don

Source: AOL

Re: In which I try TechPan for the first time (1997-12-28T21:00:25)

Peter Zimmerman wrote:

**> ...if the emulsion is saturated with water, doesn't that slow down the
> penetration of the developer,
> further dilute an already low concentration of active ingredients, and then
> reduce contrast even a bit more?**

YES. I'm sure presoaking has an effect as the developer must displace the water in the emulsion. I suspect it was more of a problem with the old thick emulsion films. I have debated this for years, but since my results suit ME, and consistency is the major factor here, I have just become lazy. I must admit that I have spent more time trying new things in the last year, as a result of this group, than in the past ten. I have often threatened to do the presoak with the sodium sulfite solution, then pour it out and add the Rodinal. I'll try that sometime. I also wretch over whether to use distilled water or just tap water for the presoak. Of course, a tap water presoak adds some unknown chemical contamination to the film.

I am currently happy with the overall quality of my Tech Pan (and Copex and Fuji HS-U) negatives, especially the short toe which I like, but will someday

experiment some more to see if I can straighten the shoulder a bit.

- > I'm going back to TechPan for a
- > standard EI 25-32 film with the occasional roll of Copex Rapid. I
- > understand TechPan, and can make it work better for me

Next week I will get to print some of the 8x11mm negs of the Tech Pan, Copex, HS-U "shootout" I did a month or so ago. As I may have mentioned, the fastest is Tech Pan, then HS-U, then Copex. Each has its unique expressive personality, and "best-fit" (read characteristic curve and spectral sensitivity) for a given situation, so a place in my "toolkit". Tech Pan is still my "bread and butter" film because of its speed and availability in 35mm, 120 (16x20 prints from these can be awesome), and 4x5. As "the little gray cells" become scarcer and scarcer there is an advantage in dealing with fewer film types.

Don

Source: AOL

Re: HS-u, etc. (1998-01-10T13:51:57)

Michael Kaiser wrote:

> I wonder if there is a way to slit 16mm stock down to 9.5, in case I really succumb to the "lust in my heart"?

Of course! Do it all the time.

<http://www.slonet.org/~dkrehbie/2photo/negative/slitter/slit.htm>

I have been using Agfa Copex and HS-U slit from 16mm, and have just ordered some Super HR-21 and Kodak film from Filmdex Incorporated. The Kodak is apparently perforated, so I will have to see if the perfs create a problem. I may have to shift the slitter blades to avoid the perfs.

Don

Source: AOL

Re: Microfilm: AHU, HDR, Super HR? (1998-01-18T11:03:07)

> because the film is too thick,

Remember that when using a Minox, the film gate may be a critical factor in getting good registration. I suspect that thick, springy, film like Copex, doesn't like the curved film gate. I would be interested in comments about the pressure plate mechanism and the maximum film thickness (and stiffness) permitted without damage. Or were the old film of the '30s, '40s, and '50s really thick and tough. My old "nitrate" films from the '30s are really stiff now, but I can't remember what they were like when new. It would be interesting to know the tolerance for both the curved and flat plane Minox models. Has anyone tried Copex in both curved AND flat gate Minox cameras? (With tripod, of course!)

Don

Source: AOL

Re: Microfilm: AHU, HDR, Super HR? (1998-01-18T12:27:39)

Regarding film selection -

Tech Pan is a poor substitute for the discontinued Kodak High Contrast Copy Film (5069) with Perfection developer. (Anyone remember this film and developer? - Al?)

Tech Pan has a personality of its own which is delightful in certain situations and a terror in others.

Tech Pan is available in 35mm, 120, and 4x5, which allows one to develop a fairly stable technique. The others are not?

In my system with spot meter, and Zone System, Tech Pan with Rodinal/sodium sulfite gives me a Zone I density of 0.1 when exposed at ASA 25. Agfa Copex does the same at about ASA 6 and Fuji HS-U at about ASA 12. (5069 was ASA 6). (I am about to try Super HR.) So Tech Pan is faster.

I have tried every Tech Pan developer I could find and none provided the short toe I like as well as the Rodinal/sodium sulfite combination. The others also provide a much weaker "edge effect" which I like.

All of the films in question have VERY unfriendly shoulders and vary in the range of scene luminosity they can tolerate.

I have added Copex AND HS-U to my tool kit since they do have a lovely "feel" and can make a contribution to the creative process. I have NOT abandoned Tech Pan. It is a bit like asking which of your children you like best. Relationships with film are a bit like relationships with people, success depending largely on what you expect and what you invest.

Regarding spectral sensitivity -

Tech Pan is red sensitive and will render red harbor buoys as white. It is also HORRIBLE for portraits. BUT, it does wondrous things with the bark of cedar and fir trees. It does unpredictable things with the granite walls of Yosemite which, in spite of their visual appearance, have a lot of subtle red areas. I am eager to try Copex and the Fuji films in the Valley.

Kodak recommended a CC40C - CC50C (Cyan) filter for Tech Pan to smooth out the curve. I tried it. The ASA drops 2 stops. As I recall the filter factor for a #25 (red tricolor) is 2, and for #58 (green tricolor) is 12.5. Tech Pan has a unique personality which may just give you some very nice images which differ significantly from those made with any other film! I have tried this with Tech Pan and T-Max - same scene, same camera, etc. TOTALLY different expression! Good in some cases, bad in others. Examples made for testing speed and resolution with Copex, HS-U, and Tech Pan confirm the personality difference, although Copex and HS-U appear generally similar.

The personality of a film cannot be adequately deduced from the literature. One must perform one's own evaluations. I suspect that "personality" differences with "tungsten" films may be apparent, but will vary with the nature of the scene. They should be evaluated without filters to investigate conditions in which the film would have an expressive advantage. There are so many good choices that correcting a deficiency is hardly necessary.

I must also thank the members of this group, especially Bob Parks for the Copex introduction, and Joe McGloin for the Fuji HS-U. Now if someone could just find Adox KB14.

Al is dead right, one needs to know the objective and pick the best tool. I am

probably being a bit nostalgic about 5069 and KB14, but at the time, they were the best I could find in the 35mm standard format. Ah, for a batch of fresh Cykora!

Don

Source: AOL

Re: How do you determine enlargement exposure ? (1998-01-19T08:13:42)

I have been using an Ilford EM10 "Exposure Monitor" (\$20.79 in the latest B&H catalogue) for some time now. It operates just as Joe described, and does indeed save a lot of paper. I know, for example, that if I set the dial to 25 and meter the film base between frames, I can adjust the enlarger lens aperture so the middle LED lights and have an exposure of 12 seconds for perfect black. It doesn't provide any where near as much information as "test strips", but does get one into the ballpark. I record a value for each negative with the dodging and burning instructions, and have found that when printing a negative after time, I can come quite close. It doesn't help when a company changes emulsion characteristics like Ilford just did.

Don

Source: AOL

Kodak Ektar 25 (1998-01-19T15:11:49) I have been led to believe that Kodak no longer makes "Ektar" film. It has been replaced with Royal Gold 25 (RZ-25). Anyone know for SURE? I liked the Ektar 25 emulsion.

Don

Source: AOL

Re: u-Films; Again! (1998-01-20T20:54:08)

Doyle Martha wrote:

> I recommend

> Fuji's "Resolution Test Document". (Mainly because it's free.)

> Al

I have a suggestion (one I will also try to follow). When referencing something that others might want to acquire, TELL US WHERE TO GET IT! For the last eternity we have talking about various films and I have spent an inordinate amount trying to find sources. I promise not to mention Kodak 5069, Adox KB14, and Cykora paper ever again.

Where do I get Fuji's "Resolution Test Document"?

Don

Source: AOL

Re: HC-110 (1998-01-23T19:02:58)

Peter Zimmerman wrote:

> Earlier in the week I talked to the Kodak folks at their 800 number. The guy at
> the other end recommended I try HC-110 in _dilution F_ with TechPan. He said it
> gives an EI of 32 and a contrast index of 0.8 developed at 20 C (68F) for 6
> minutes. Agitation: 5 sec inversions every 30 sec.

HC-110 has been a real favorite of many for years, and was part of my original experimentation that eventually led to my adoption of Rodinal with sodium sulfite.

1. I agree that 0.8 is way too high a slope for printing on #2 paper. I actually like about 0.55 - 0.6.
2. Agitating every 30 seconds "hits" the highlights too often and is the cause of the high CI. The trick is to withhold agitation until even the low values have exhausted the developer. I don't know exactly when this is with Tech Pan, but is the reason for the 1 minute interval with the Rodinal procedure.
3. My guess is that, to a point, the dilution is no more important to the CI than the agitation scheme and total development time.
4. My experiments with Rodinal continue to show that, although the density at Zone V may be similar, the density at Zone I (the point I determine film speed) is one (1) stop less WITHOUT sodium sulfite, providing less shadow detail (and what I define as less film speed). In effect, the sodium sulfite tends to provide a shorter toe and a straighter curve between Zone I and Zone V.

I have been experimenting with the single inversion each minute in a half filled tank according to the suggestion of Bill Hoy. Looks promising! I think agitation is THE most important factor in taming HOT film.

Don

Source: AOL

Re: Photographer's Formulary TD-3 (1998-01-24T13:16:47)

John Brubaker wrote:

> Don, Pete, and all - I just processed a roll of Agfa Copex in Photographer's
> Formulary TD-3 Tech Pan developer. I've used this developer and 35mm Tech
> Pan with good results. The Agfa Copex was exposed partially at EI 50, and
> partially at EI 25. The negs look thin but printable.

I have had generally good luck with Copex in the LX set on Auto with the ASA set to 12 (as low as it gets).

I just looked up my notes and graph on my experiment with Tech Pan and TD-3. I exposed identical rolls (35mm) from Zone -1 through Zone XIII. One roll processed by standard Rodinal routine and the other with TD-3 and the "recommended" procedure. The curves are nearly identical starting at Zone IV, BUT the Rodinal provides a little more than half a stop better film speed at Zone I, II, and III. As with all of my tests, Tech Pan with Rodinal/sodium sulfite reliably provides a density of 0.1 at Zone I. With TD-3, I got only 0.05.

This is nearly the same curve I get with Rodinal alone, and the same general toe shape I get with Technidol. The TD-3 is a lovely developer, and were it not for the reduced low value density, I would probably use it. As I recall it is less expensive than Technidol.

I too have just developed the second roll of Copex in 2 days, both with Rodinal/sulfite, and with similar results. Yesterday I exposed with the LX 1 roll each of, Tech Pan, Agfa Copex, Fuji HS-U, Fuji Super HR, and AgfaPan APX 25. Except for processing the APX as per Agfa recommendations (1:50), all were developed with Rodinal and sodium sulfite, 1.5 minute presoak, 5 minute total (20 deg.C), no agitation at the start, and 1 invert and 1 roll (about 2 feet) on the counter top (about 5 seconds).

Each roll contains gray (or white) card exposures adjusted to provide a reading of -

EV 8.3 and exposed at 1/2000, 1/1000, 1/500, 1/250, 1/125, 1/60

EV 14.3 and exposed at 1/2000, 1/1000, 1/500, 1/250, 1/125, 1/60

EV 17.3 and exposed at 1/250, 1/125, 1/60, 1/30

I thus, at ASA 25, have exposures ranging from Zone -3 to Zone XII.

With the LX mounted on a Tiltall tripod (talk about overkill), I also exposed a scene with near shadows in the EV 9 range and a distant hill with white houses (EV 17 plus). Exposures were made at all of the possible settings from 1/2000 to 1/30.

As soon as I get a chance to print samples (hopefully this year sometime), I will try to assess the usefulness of each. An initial observation (aligning the frames in which density first appears, it is evident that Agfa Copex is about 2 stops slower than Tech Pan (for me that means ASA 6), Fuji Super HR is another stop slower (for me about ASA 3), and Fuji HS-U somewhere between Copex and Tech Pan (for me, in the ASA 12 range). I have yet to determine the Contrast Index of each of these test rolls, but in each case, the high values appear to be well below "boiler plate" density. We'll see.

If indeed Super HR is ASA 3, as apparently confirmed by the scenic exposure series in which the 1/30 had no shadow detail, it will be general impossible to use it in an LX, since the lowest ASA setting for auto exposure is ASA 12, and the slowest manual shutter speed is 1/30. Should work in a C though with an extra ASA and manual shutter setting. Fine with a IIIs.

Please remember that all of this is unique to MY system and your results will probably vary. More later.

Don

Source: AOL

Re: [SubMini] Honeywell/Nikor Minox Reels (1998-01-25T08:03:09)

L.J. Clark wrote:

> I wasn't aware that Nikor made Minox SS reels (The discussion

> on this list centers on the Minox tank, homebrew reels, mods of
> plastic reels, etc.).

I'm looking at my box which shows "Honeywell Nikor", "Stainless Steel",
"Minox (9.5mm) Reel", "Cat. No. 3070". It is one of my two collector's
items (the other being a Minox developing tank). I never use either. I
prefer my little drum.

They should be around.

Don

Source: AOL

Re: 15-exp loads in older Minoxes (1998-01-26T16:51:17)

Peter Zimmerman wrote:

> One thing, however, to point out: the frame advance compensation can only be
> exact for *one* film thickness, something approximating the thickness of
> whatever bases were common in the late 1940s-early 1960s. Estar thin base is
> probably too thin for it to work exactly.

I can confirm this. Having just exposed a number of rolls of Tech Pan, Agfa Copex,
Fuji HS-U & Super HR, I can testify that each has different spacing, both
progressively and uniformly. Not only thickness, but stiffness, or springiness,
appears to be the culprit.

Don

Source: AOL

Re: Film thickness in Minox (1998-01-27T07:32:19)

A 1970s Kodak B&W Film publication states that their roll film bases vary
between .0036 inch and .005 inch (3.6 - 5 mils). Tech Pan is listed at 4
mils and is available in 150 foot, rather than the usual 100 foot, rolls.

My "standard"

Tech Pan load is 44 exposures and operates freely.

Thanks for asking. I didn't know either.

Don

Source: AOL

Enlarger lenses, was Minox name (1998-01-31T10:54:33)

Peter Zimmerman wrote:

- > I don't know why a camera lens would focus more accurately. easily, yes,
- > if you use the lens's focusing mount in addition to the enlarger's focuser.

You are correct! I did mean easily, and with the ease comes, for me, better accuracy. When one uses the camera lens' focussing ring, I have always presumed that the enlarger's bellows must be in an exact position, placing the negative in the proper position behind the lens. Thus, if the camera lens is focussed at one meter, the film must be one meter above the paper. Right?

- > But the reason the camera lens is adequate or excellent is that the Minox
- > is only using a tiny central slice out of the field. Bet if you tried to
- > cover a full-frame 35 neg and blow it up to the same percent enlargement as
- > you do with the Minox negs it *would* show field curvature.

Oh, you are SO RIGHT! The tests done when I was deciding whether to use my 55mm

Micro Nikkor as an enlarging lens for 35mm, included, among fine "enlarger" lenses, my 50mm Summicron from the M3 I had at the time. AWFUL!

Don

Source: AOL

Re: Enlargers used for enlarging Minox, 110, (1998-02-12T07:20:05)

16mm,35mm (was: Minox e enlargements)

Michael Goldfarb wrote:

- > One other thing, guaranteed to outrage many of the darkroom techs out
- > there:

The objective is not good technology, it is good prints! Only YOUR "outrage" with YOUR results matters. I have scars from battles with "experts" and/or "traditionalists". As Fred Picker liked to say when asked if something would work, "Try it."

Don

Source: AOL

Re: Minox film (1998-02-17T18:51:32)

As some on the list know, Adox KB14 was one of my favorite 35mm films of all time. I used to get it from Freestyle in the '70s and early '80s and would give a "bunch" for a new supply - IF the emulsion is the same. I haven't the faintest idea how it compares with anything in terms of grain or resolution, but I do know that when I went back to print a lot of unprinted old negatives, every time I had that glowing feeling, it was with an Adox KB14 negative. It is classic case of a film having a personality that does not translate to specifications. My guess is that it has to do with the shape of the characteristic curve and spectral sensitivity. Something like the feelings we have for the grand old papers - I shed a tear when looking in the back of my "Leica Manual" - full page ads for du Pont "Velour Black" and "Verigam" and Ansco "Cykora" The "Rollei Book" had a full page ad for ADOX films.. KB14 and Kodak High Contrast Copy Film are the two films I wish I had frozen a ton of when available.

BUT, I suspect, as with all things, you can't go back. I will have to try a KB14 negative at 30x.

Don

Source: AOL

Re: White light on the Minox C (1998-02-19T20:14:46)

Peter Zimmerman wrote:

> Do you by any chance have a curved focal-plane C?????

No, I have the Minox lens, and the film gate is flat. I also have the flush frame counter, so am somewhere before the red light and after the lens and

cosmetic changes. The serial number puts it (according to Heckmann) somewhere in the 1971-72 era, about when I got it.

I just went to Heckmann to check the serial number and there, in large type was the reference to the "long exposure white light". I do appreciate y'all for your kindness to one who obviously can't read.

Don

Source: AOL

Re: Film for Minox (T-Max 400 CN) (1998-02-25T14:48:28)

Michael Goldfarb wrote:

> I don't know if anyone has tried the new Kodak film yet, but many of our
> Minox experts (Don K, Pete Z, John B) rave about their results with
> XP-2...

Thanks Michael, --- I think!

There are no experts in this discussion.

When you begin to enlarge Minox negatives made with films of this type, you are venturing into the world in which only the artist can judge the results. If the results express your vision, it is good, if not, bad! I DO like some of the results I have achieved with XP2, BUT in an expressive way only. I think it is worthwhile for any artist to test. It is NOT sharp at any useable enlargement from a Minox negative - Chromogenic films are not sharp in the same manner as are silver emulsions. So you have less grain, but also with less sharpness. There is no free lunch. After spending the year testing a whole bunch of different films, including these two, I have concluded that the best answer is the one Fred Picker almost universally used when asked if something was any good - "Try it!". The most important lesson I learned during my testing mania was to use 35mm film which is easily processed, and then print the middle 1/3 of the negative at whatever size you anticipate for Minox enlargements. Only YOU can decide what YOU like.

Don

Source: AOL

Re: Minox MINOCOLOR PRO (1998-02-28T10:35:00)

Frank & Terri Snodgrass wrote:

> I checked with Fuji about the film and they told me that it is the NEW
> REALA 35 mm which is based on the Fuji APS film and not the APS film it
> self.

It took me a month to get that information out of Fuji a while ago. You are absolutely correct. It is superior. BUT - BE SURE IT HAS A BIG RED "NEW" on the box. I just yeaterday had a photoshop owner try to tell me that his 36 exp rolls of Reala were really the new stuff even without the word "NEW". I took the 24 exp rolls wirh the big "NEW". The "NEW" Reala has a grain size 1/3 the size of the regular "old" Reala according to their literature. you probably won't find it everywhere.

Also, you should know that the Fuji informed me that -

"All Fuji products made for the USA have UPC codes that begin with 74101. If the UPC codes begin with anything else, then it was manufactured for distribution in another country. What this means is that we have not been involved with the shipping and distribution of the film and cannot guarantee the condition of the film, nor can we offer support for products that are not distributed by Fuji Photo Film USA."

The NEW Reala I got yesterday has a UPC code of 902520 -.

Don

Source: AOL

Re: Minox MINOCOLOR PRO (1998-02-28T10:43:02)

I forgot to mention - I have had this film processed a couple of places locally (35mm and Minox) and found that MPL's results were significantly superior. They have spent a great deal of time tuning their system for the Minox loads and my regular sized Minox prints from MPL are regularly praised and can be merged with my wife's 35mm prints, of the same size, in the scrapbook.

Don

Source: AOL

Re: Minox C/COMPLAN (1998-03-10T07:32:42)

Roger Beamon wrote:

> He (Heckmann), at least, "could not see any difference between comparison
> photos" (from Complan to Minox lens).
> He gives no indication, however, of how strictly controlled the comparison
> photos were.
>
> I think you've just commissioned a project for yourself, Pete. We wait with
> interest. 8^)

Been done, Roger, years ago.

Tiltall tripod, Kodak High Contrast Copy Film (5069), "beat-up" IIIs, and
"near mint" C

and later

Tiltall tripod, Tech Pan, "beat-up" IIIs, "near mint" C, and "well used" LX

11x14 and 16x20 inch enlargements with an Omega B-22XL enlarger, Nikkor 28mm
lens. Sharp grain on the print.

In each case, the IIIs provided a "feeling" of crispness not found with the
other two. They each provided excellent results, but the IIIs negatives had
that little "something extra". I doubt that it could have been measured.
Ever since, I have grabbed the IIIs when crispness was an issue. There is
certainly no doubt in my mind that the older lens/film-gate combination is AT
LEAST as good as the later one.

BUT, it is not that simple. Martin, some time back, described the tolerance
at the film plane for high magnification prints - miniscule. My
theory now is that flexible film (like Tech Pan) conforms better to the curved
gate, and stiff film (like Copex and Super HR) work better in the flat gate.
I can't check this because my IIIs is sick.

I also suspect that since most of our Minoxen were purchased used, with little

written history, they may not all be "factory sharp". Don Goldberg told me that he has seen "out of focus" examples - rare - but possible. I am sure they are all sharp enough, after all they were assembled by people and the position of the lens is adjustable. But when someone says they couldn't see any difference, that covers a lot of ground.

I have ABSOLUTELY NO DOUBT that, if your Minox is not damaged, there are many factors which will degrade its potential long before the relatively minor differences in the lens/film-plane design.

Don

Source: AOL

Film thickness (1998-03-10T11:22:29)

Mike Black wrote:

- > Not only is Tech Pan more flexible, it also has a much thinner base
- > (polyester, right?) than our old favorite films.

Tech Pan is listed at 4 mil and Copex and Super HR at 5 mil. I think the material is different, which may account for the "stiffness".

Don

Source: AOL

Re: Nalgene Pipets for Rodinal (1998-03-10T11:59:17)

Doyle Martha wrote:

- > if you think of an ounce as 500 drops. Then:
- > 1:100 is 5 drops plus water to 500.
- > 1: 50 is 10 drops plus water to 500. etc.

Forgive my ignorance (I never liked chemistry, or physics) but is a drop, is a drop, is a drop? It seems that when I first tried your "Mixer" the drops were a different size when issued from different size droppers. Does the surface tension of the particular liquid always determine the drop size? If so, then your table above is very valuable. Thanx!

Don

Source: AOL

Re: Film thickness (1998-03-10T12:45:30)

Mike Black wrote:

- > Are those measurements for the bases alone? If that's the case, then it's
- > logical to assume that the Super HR is much thicker... b&w Tech Pan has
- > only one emulsion layer (and an anti-curl layer, I think), whereas a color
- > film like Super HR has several layers.

Fuji Super HR is a B&W microfilm, so whatever is needed to that end is there. My guess is that the emulsions are pretty much the same these days. The Super HR comes in 5 mil, 4 mil, and 2.5 mil - whatever that means. It, and Agfa Copex Rapid, just feel thicker and "springier" than Tech Pan.

Don

Source: AOL

Re: Nalgene Pipets for Rodinal (1998-03-10T12:51:13)

Peter Zimmerman wrote:

- > A drop is not always a drop. It depends on the density of the fluid, the
- > surface tension of the fluid, and how strongly the fluid wets (or repels) the
- > dropper. Viscosity also plays a factor. But. If you calibrated a specific
- > fluid in a specific dropper at a given temperature, it ought to be repeatable.

Does that mean that a drop of HC-110 will always be the same volume (practically speaking), or will a glass dropper, for example, produce a different volume than a cheap plastic one?

What I REALLY want to know how to mix Al's "Mixer" developer when he gives volumes in drops! Do I have to get a "calibrated" dropper from Al?

Don

Source: AOL

Re: Color Processing, Part 2 (1998-03-16T09:54:41)

Peter Zimmerman wrote:

> I used a black EK can and got film fogged from end to end.

I also think I got fogged Agfa Copex Rapid when I stored 9.5mm strips in one.

Don

Source: AOL

Re: EK cans ? (1998-03-16T14:26:35)

Allen R Garrard wrote:

> The ones I use are the ones that bulk 35 mm films come in.

Those are the ones I now use - the large metal cans - BUT I have had leaks around the lid, so have added tape to insure a tight fit - AND keep them in a dark place.

Don

Source: AOL

Re: Boy Scout film splitter (1998-03-21T15:00:55)

Mike Black wrote:

>

> It appears that there is enough interest to explore the project. We have a
> number of men in our church who have manufacturing and woodworking skills
> who could help. Most of our boys are 11-12 years old because our troop is
> new, so they would need a lot of guidance. It would enable them to earn
> their woodworking merit badges and raise money for camping equipment.

>

> We would design the unit to slit 35mm down to BOTH 16mm and/or 9.5mm by
> using interchangeable parts, so the unit would be attractive to the majority
> of the submini community.

>

> I think we would need to start with an initial production run of 20 units to
> take advantage of economy of scale. That way, we could maintain an inventory
> in the event that the machine became popular amongst the submini community.

>
> One other good thing... I think we can get a CPA from the church membership
> to work out a tax-deductible arrangement. You will donate money to the scout
> troop and we will send you a slitter as a thank-you gift. I can't promise
> anything along that line because I need to have a look at the tax code, but
> it's worth exploring.
>
> We would need to agree on a price before we got started. We would want to be
> fair, keeping in mind that good camping equipment costs a lot of money these
> days. I think it could be done in the \$50-\$75 range, which is well under the
> cost of ten rolls of submini film.
>
> Of course, we would need to design and build a prototype first, just to be
> sure that the project is feasible.
>
> What do you think?
>
> MB
>
> -----
> Mike Black
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> -----

--
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Source: AOL

Re: Tech Pan (1998-04-10T20:02:14)

James Hewitt wrote:

> Why is it that Kodak makes mention of using Tech Pan for portraits on their

website?

> Something about it hiding blemishes...

I just don't like the pasty look I get with it. I just think there are better portraiture films - Agfa Portrait color film for example.

Don

Source: AOL

Re: Scratching film (1998-04-14T11:46:09)

Larry Feldman wrote:

>

> With all this talk of reloading cassettes, counterfit cassettes, etc. I've
> got to ask. Don't you folks ever have trouble with the film scratching?

No, Larry, I don't.

One Minox roll I cherish is a factory load of AgfaPan 25 from the '70s which has a scratch the entire length. I occasionally get short scratches. I continue to use the same cassettes, merely blowing them out each time. I think the light traps eventually become less effective, but I never swap out unfinished rolls so a couple of lost frames at each end are the only loss. As for 35mm, I began loading movie scraps for the Ansco Memo in the '30s and the ONLY factory loaded film I have bought since is Kodachrome. In the '70s I found several boxes of Kodak "Snap Cap" cartridges on sale and, I think, bought 40 of them - which I am still using and have probably put somewhere between 20 and 40 loads through each. I have NEVER seen a scratch on a 35mm negative! The only warning I have heeded about reusable cartridges is "Don't Drop!". I am sure I have used Minox cartridges many more than 20 times. I never count and only stop using one when it breaks. Incidentally the best 35mm reloadable cartridges are the ones that Ilford and Agfa used to use for all of their film.

I can't remember how I avoided dust before canned air, and in all fairness, I always lived near the ocean where dust was perhaps less of a problem.

Don

Source: AOL

Re: the costs of submini (1998-04-21T20:27:03) I certainly agree with Godfrey about the Minox Processing Labs. I have recently been doing some experiments with Fuji New Reala (Minicolor PRO) and not wanted to wait for the stagecoach to New York. I have set up a system with a local lab which does quite nice work. I spool my Minox film into a 35mm cartridge and they process it in the normal way. The results are fine, of course no prints, just negative development - BUT there is occasional junk on the negative, occasional emulsion scratches, and a general uneasy feeling on my part as a result of having to handle the film one more time. I would allow them to process critical 35mm or 120 negatives, but NEVER critical Minox negatives.

Incidentally, they charge MORE for 35mm developing only than does MPL for Minox.

I never use "drugstore" processing - we have a superior overnight lab in Santa Barbara which provides outstanding results EVERY TIME. I can't believe that MPL is so much more expensive than HIGH QUALITY 35mm processing. It seems to me that every time I pick up my wife's 35mm family and trip prints, the bill is in the \$12 to \$15 range, AND I seem to see prices for film in the \$5 to \$7 range in the local camera stores. Admittedly film is cheaper at B&H and processing at COSTCO, but we are not talking about a high volume market here, and I would hate to live in a town without small, privately owned, (camera) businesses where I can get one of something when I want it.

We are EXTREMELY fortunate to have Don Thayer continuing to provide service for those of us who cherish it. MPL is certainly the exception to the prevailing business trend.

Considering the cost of hardware and supplies, I suspect that the "cheapest" way to get prints with the least effort might be "disposable" 35mm cameras. Certainly 35mm, in general, is the most painless way to get good images.

Don

Source: AOL

negative scanning (1998-04-21T20:30:18) Godfrey DiGiorgi wrote:

> I'm going to improve on the mask with a new cut sometime this week and
> some more opaque, grey paper ... the scanner's exposure algorithm gets
> thrown off a little bit by the white paper mask and I suspect there's a
> bit of flare associated.

I have been using a piece of undeveloped film which is totally opaque. I suspect that a piece of developed to Zone V film would be the most neutral and perhaps provide the best compromise. I'll try it. I cut out a section with the film slitter, so the minox film sits perfectly in the opening. Godfrey's warning that masking was necessary paid BIG dividends!

Don

Source: AOL

Re: Grounding Film Slitter (1998-04-22T16:06:22) Welcome, Ray -

This has not been discussed and is an excellent question - ANYTHING to eliminate dust is worth the effort! I have not grounded the slitter and film, but do pass the film through a grounded brush and antistatic cloth when winding onto the dowel to insert into the cassette.

Never worry about what question to ask, we often retrace the same ground.

Don

Source: AOL

Dust and Dirt (1998-04-23T07:18:36) Can we discuss the procedures used by our SIGSL (Special Interest Group, Self Loaders) members to eliminate the source(s) of scratches when loading film cassettes (of any size). I am sure there are some ingenious ideas which need distribution.

I have yet to find the perfect solution, and still occasionally get scratches, even with factory loads. Self loading is not the only source of trouble. Some time back, Joel Moskowitz made a marvelous suggestion which I have followed since, with significant improvement - Joel?

Do you "large format" (16mm) practitioners have a scratch problem?

Don

Source: AOL

Re: Dust and Dirt (1998-04-23T21:45:20) As long as Joel referenced his earlier remarks which are posted with my slitting dialogue, I will reproduce them here -

Joel Moskowitz suggests a technique he adapted to the Minox from a cinematography class. "Using an ear syringe, I hold the camera upside down (gate open) and blow out the film compartment thoroughly. Upside down because the syringe only has to dislodge the dust and gravity removes it from the camera. Any stronger gust of air might drive the dust further in. After blowing out the camera, I immediately (still with the camera upside down) insert the new cassette, keeping it clear of any dust from the camera."

It works for me!

Don

Source: AOL

Re: first Minocolor PRO prints (1998-05-12T07:05:20)

Godfrey DiGiorgi wrote:

> All I can say is "Wow!" Minocolor PRO is one fine film.

Try it in a 35mm camera! - .or 120!

Don

Source: AOL

Re: first Minocolor PRO prints (1998-05-12T12:11:32)

PixelPeet wrote:

>

> Sorry, I forget, what is the "real" name of this film?

>

> Peet

Minocolor PRO is reputed to be Fuji NEW Reala. There is some question about the pedigree of this film. The US versions say "NEW" on the box, but after extensive conversations with Fuji it turns out that the non-US versions do not necessarily have the "NEW". B&H in NY sells the "non-US" version which I have tried and it appears to have the same grain structure as the "US NEW".

Don

Source: AOL

Re: Fuji HS-U (1998-05-12T17:04:18)

Steve Reints wrote:

> I wonder if someone on the list can advise me about developers and
> processing times for Fuji 16mm HS-U microfilm?

Steve -

I have done some experiments with the films shown at -

<http://www.slonet.org/~dkrehbie/2photo/negative/film/persona.htm>

Take the link to "my standard procedure" for a description of my developer and technique.

I have some HS-U, but have used Fuji Super HR and Agfa Copex Rapid more extensively.

As you will see, I have found that identical procedures work well for Tech Pan, HS-U, Copex, and Super HR.

Don

Source: AOL

Scanning (was Elph Junior) (1998-05-13T06:54:06)

Paul -

I am happy to see you enthused about scanning and digital printing. The technology is mind boggling and portends great things for the future.

However, Godfrey is certainly correct in his analysis of the virtues of scanning prints

vs small negatives, as the illustration at the bottom of -
<http://www.slonet.org/~dkrehbie/2photo/digital/dig.htm>
shows. There is an incredible amount of detail possible in even a Minox negative and given equivalent optics and film registration in an APS, one should get twice as much. Even the resolution of PhotoCD (not the Pro Scan) is less than that which
a 2700ppi negative or slide scanner can provide.

> Also, photo reproduction from ink jet printers is getting phenomenally
> good.

Two years ago, the original Epson Stylus Color Printer was adequate to fool an entire photo society (and juror) with B&W prints mounted, matted, and framed behind Plexiglas. How good does it need to be? The REAL issue now is permanence!

Don

Source: AOL

Re: Developer quantity (1998-05-15T11:17:17)

Allen R Garrard wrote:

> What is and what is not enough developer?

Fred Picker used to say in response to questions about technique - "Try it!" I only bother with things that work for me. I noticed long ago, before I had a Minox tank, that Minox negatives, developed WITH HIGHLY DILUTE DEVELOPER, in a 250cc Nikor tank, looked better than 35mm negatives developed in the same tank with the same developer. By better, I mean, better tonal range and a longer shoulder. The only conclusion I could draw was developing agent volume. After discussions with several "old timers" (I was MUCH younger at the time) I concluded that the value of good negatives far exceeded the value of a few cc of developer. I still think that IN CERTAIN CASES such as highly dilute solutions, more is better. I recently talked to a former press photographer who said that they had a big tank into which all of the film went, and when he thought about it, his negatives seemed to be really good then. I am sure that this kind of "imprecise talk" will elicit responses from many, but that is my experience, and I do use more developer than is "required". I develop 35mm in a 600cc "drum tank" to avoid what I consider

the worst invention of all time for 35mm - the spiral reel. So how come Gene Smith and Roy DeCarava made (make) such beautiful images? They used (use) conventional film like Tri-X which accepts lots of agitation without blocking the highlights while overcoming the "developer squirting through the sprocket holes" problem. This is not the case with Tech Pan!

As Fred Picker said - Try it! If you use Tri-X with D-76, use the factory recommendations, as with any "normal" film developer combination. If you want to use films that were not intended for "pictorial" use, experiment to find the right amount for YOU.

Don

Source: AOL

Re: Design of Minox lenses (1998-05-16T14:35:06)

Michael C. Taglieri wrote:

> ... why have some people on this list said the Complan gives sharper pictures? Or is that true?

I have always felt that MY IIIs was sharper than MY C. It is certainly not much, and visible ONLY with Tech Pan, (I discovered it first with High Contrast Copy Film). I must also have the two prints side-by-side to see the difference. But that is not the whole story. I now suspect that stiff films like Copex Rapid and the 5mil version of Super HR are better in the flat film gate than in the curved one. SO - Who cares? I don't. All of my Minox are sharp enough for anything I want to do and If I start worrying about what film to use in what camera, all is lost. OH, I forgot to mention, to see the difference you must have the camera on a very sturdy tripod and use a cable release (or at least be VERY careful) - and be sure you don't move the focus dial, etc., etc. This is a bit like arguments about the "R" word. There is no way the full capabilities of the camera or (super fine) film will be utilized without a tripod, and that is not what the Minox is all about.

Incidentally, the problem of film registration is not unique to the Minox. Tech Pan may work differently in a Nikon, Leica, Pentax, or in a Rollei TLR. I don't think TP is as sharp in my Rollei as it should be and I am sure it is the VERY thin film with a large unsupported area.

The fact is that arguments about the "R" word, in relation to either camera or film, are far less relevant than image selection, management, technique, and perhaps film personality and grain. Every camera I own is better than I am!

Don

Source: AOL

New Slitter (1998-05-22T08:30:18)

Yesterday afternoon I received, from Ray Pepalis, a slitter block to slit 16mm film down to Minox size. I have a CRUDE one, his is elegant! Last night I made several test runs to check the performance in my base, then slit four loads of Fuji Super HR (without changing blades). Ray's design works perfectly for me, I like his basic design better than mine. He has an ad "Film Slitter Kit 5/1/98" in the SUB CLUB at - <http://members.aol.com/xkaes/forsale.htm>
Check with him regarding price and availability - this certainly provides another option for loading your own.

Don

Source: AOL

Re: minox ss reel (1998-05-24T11:08:46)

Oh, my! \$100 for a spiral reel? Walter Zapp's idea for the Minox tank is light years ahead of the spiral reel. The Minox tank is a spectacular design which, in 35mm and 120 sizes, would make better negatives than the spiral reel. Why adapt an inferior design to the development of Minox film?

Ray Pepalis is now making cost effective slitters, how about someone manufacturing spiral drums for 250cc Nikor tanks.

Don

Source: AOL

Re: minox ss reel (1998-05-26T07:14:11)

Michael C. Taglieri wrote:

> If it's true that reels give uneven development of Minox film compared to

> drums, why would you want to use them even if they can do multiple rolls?

I MUST jump in here and repeat a comment I made a while back. Reels work fine with "normal" film and "normal" developers, and normally busy scenes. In fact, reels work fine most of the time for 120 film. It's the sprocket holes in 35mm with restricted agitation and "active" developers that cause problems. Well, I should say generally noticeable problems. Only YOU can decide if your reels are causing uneven development. Make a series of exposures of a blank surface - much like a film speed test. The idea is to see if you get ABSOLUTELY even density at a variety of density levels. If YOUR results are acceptable for YOU, your system is fine.

Kodak seems to think there is a problem with Technidol Liquid - they are quite specific about the agitation motion. A lot of effort has been expended over the years to find alternatives for the reel - golf tubes etc., so a lot of people seemingly have been dissatisfied with reels. On the other hand, many of the best images ever produced went through ss reels. Bill Hoy's suggestion made a world of difference for me with 35mm film and reels.

BUT - there IS a difference in the appearance of a negative that is related to the amount of developer used, and the flow of developer over the film - as Fred Picker says - "Try it!".

My original reason for using a "pill bottle" had to do with the expense of a Minox tank and ignorance of the existence of a spiral reel. As I recall it was a weekend and I wanted to develop a roll of film. I HAD a pill bottle and some plastic strip.

If you have a spiral reel, and you like the results, by all means stay with it! If you need to spend \$100 for a ss reel, or \$? for a Minox tank, you might want to try the \$1 solution (and a bit of your time) first.

Don

Source: AOL

Re: scanners and subminiature negatives (1998-05-27T06:55:35)

Welcome, Tom

The Nikon CoolScan series have a negative strip scanner which will hold 6 35mm frames or an 18 frame strip of Minox film. As Godfrey discovered, masking the

film strip is critical. I used my slitler to create an opening in a piece of unexposed, developed 35mm film into which the Minox film exactly fits. Thanks Godfrey! It helps to use a bit of 3M Poster Tape to hold the 35mm film to the carrier. It would theoretically be possible to create 2 slots and scan an entire Minox 36 exposure strip at one loading. BUT, there is a "GOTCHA". My carrier has plastic bars between each 35mm frame position and my Minoxii each space frames differently, so I have to do a bit of wiggling. But it works perfectly - getting nearly all of 3 Minox frames with each scan. Absolutely great for proofing and small prints!

Don

Source: AOL

Re: long life developer (1998-05-31T16:53:43)

I keep Rodinal in a syringe in the refrigerator and usually have a year's supply - no evidence of change over that time. I am currently trying an old favorite, Pyro, with Tech Pan, Copex, HS-U, and Super HR. the instruction sheet from the Photographer's Formulary indicates that the stock solutions (A & B) have an indefinite shelf life. Bob Park's Special, is still working after a LONG time in partly filled brown bottles. All of these require "mixing" of some sort - I presume you mean "dissolving" when you say "mixing" - or are referring to the shelf life of opened concentrate.

Godfrey - Do you mean XTOL "working" solution will last "one year from date of mixing."?

On the subject of developers - is anyone currently using any of the Pyro mixes?

Don

Source: AOL

Film Recorders (1998-06-14T17:07:13)

Does anyone have specific knowledge about how film recorders and digital photoprinters work? If so, I would like to converse privately.

Don

Source: AOL

Re: advice on making a slitler - new design (1998-06-14T19:32:27)

Michael Bower wrote:

- > As the film goes over the blades, it tends to wander and then tear. It
- > is very tough to gut the film. (Film for testing was previously
- > processed Fujicolor. (Is processed film "tougher" than unprocessed
- > film?)
- >
- > One thought I had was that the blades need to be much shorter to the
- > cuts are at the very ends of the blades.

I use double-edge razor blades because of the thinness (is that a word?) and reduced drag. When placed at a fairly low angle of attack, and with only about 1/16 inch penetration, the cuts are quite clean. Any slitler I have tried with a higher angle of attack, and/or thicker blades, tended to produce rough edges (tears) especially with film like XP2. Yes, the type of film makes a difference, but not that much, so experiment with the angle at which the blade contacts the film, and where the film contacts the blade. Without a pressure plate of some kind, you will probably need a deeper penetration than with the "moving block" design. I have NEVER had rough edges with the "moving block" design (unless I used the blades too long), and I HAVE had rough edges with every "moving film" design.

You might add some edge guides to your blade holder to prevent (minimize) film "wander".

ALSO, I find that considerable pressure is required on the "moving-block" and pushing, so I suspect you just don't have the leverage with the small crank to steadily pull the film through three blades. Even the "Minox" slitler is difficult to crank. I would guess that for all of the "moving-film" slitters, a crank of at least 4 inches length would be beneficial.

Oh, I almost forgot - I find that I must, on occasion, wax my block to reduce friction on the protective paper. It moves quite easily when waxed, and pretty hard when not! Do you have a friction problem with the film over the blade holder?

Don

Source: AOL

Re: Protective paper for block slitter? (1998-06-14T21:30:58)

Hi Fred -

The really nice thing about having a bunch of people all trying to do the same thing, is that one learns a lot! I never thought of eliminating the paper, but may try it. It IS a pain, although I now have a "lifetime" supply cut. Although I don't wear a belt AND suspenders, I tend to be cautious, so just wanted to be sure that the film had no contact with anything moving. I too use a cold light which really helps, and am sure that all of the scratching is done IN the camera.

I cut the 35mm and 16mm wide adding machine paper on a band saw - AND AS RAY WARNS - HAVE A JIG TO HOLD THE ROLL - WHICH CAN CREATE ALL KINDS OF INTERESTING MOVES IN A SAW OF ANY KIND!

Don

Source: AOL

Re: Vivitar XM 300 Sharp? (1998-06-17T20:52:46)

Please believe that I am NOT flaming. I need DATA! - and VALID comparisons! I do respect your contribution, Al, but wonder what is the purpose in comparing a "half-frame" (APS) camera against 16mm and 9.5mm cameras. How good are the GaMi-16, Minolta-16QT, and Mamiya-16 Auto? I know what an EC can do and a P950, but the quality of Atoron Electro, and Mec-16 (even loaded loaded w ASA 50) are unknown to me. I would suspect that it would have to be a pretty bad camera that wouldn't beat others half, or less, its size. What does "less grainy" mean? I thought that was a function of the film and enlargement factor - not the camera. Or am I missing something - the Vivitar XM300 IS an APS camera isn't it?

I agree with Godfrey - I would be happy if we would all publish HARD data and EXAMPLES.

I'm happy that the Vivitar XM300 is a nice camera. I would CERTAINLY HOPE that its negatives produce sharper pictures than negatives half or a third

its size. My old 1929 Ansco Memo "single-frame" does too!

I was thinking of trying to find one, and would like to know how an 8x enlargement compares to that from a Leica, not a P950. I suspect that the cost differential between a leica and the Vivitar will rear its ugly head, but the P950, as I recall, costs more than a Leica.

Don

Source: AOL

Minox film lengths (1998-06-20T07:04:01)

I measured the lengths once and Pete Zimmerman created a formula which yields these approximate lengths. I have used 36 exp. loads of Reala and not been able to close the LX after about 30. My usual Tech Pan load is about 42 exp, or 25.5 inches - which has worked fine for years.

15 exposure =	32 cm	12.9"
30 exposure =	52cm	20.3"
36 exposure =	59 cm	23.2"
50 exposure =	77 cm	30.1"

Don

Source: AOL

Re: Like Water for Stop Bath (1998-06-20T11:33:37)

Joe McGloin wrote:

>

> With some films, you better NOT use a stop bath.

Same with PYRO developers!

Don

Source: AOL

Re: Minox film lengths (1998-06-20T15:45:09)

Peter Zimmerman wrote:

I ran into serious

> troubles once trying 36 exposures, so I strongly advise against it.

YES! If you feel any increase in resistance when closing the Minox (advancing the film) STOP! The film is probably "filled" the take-up chamber and will go no farther. I just left the camera partially closed until I got home and removed the cartridge in the darkroom. I stripped the film advance gear in an early Leica M3 without much effort. Some self-loads seem to have more resistance than others - some cartridges have "pinched" film slots, but this appears with the first exposure.

Don

Source: AOL

Re: [Fwd: T-Max 3200] (1998-06-20T15:49:10)

Frank & Terri Snodgrass wrote:

> Has anyone on the list ever tried the Kodak T-Max 3200 in any sub mini
> 16 mm to Minox.

Yes. It provides a VERY interesting image, which I have tucked away as something to explore later. It produces a "different" artform. Nice stuff, if grain is part of your vision.

Don

Source: AOL

Re: P950 -- Wrist Camera (1998-06-21T14:44:45)

I agree with Pete's excellent review on all points. I did expose Tech Pan in both the P950 and LX, and although didn't make large prints, thought that the P950 was acceptable - certainly not better, but not visibly worse either. An acceptable image gathering device. The limited aperture and shutter speed ranges mean rather careful film choice for a given situation. I thought having to rest both on a ledge or rail to assure similar views was a little too far removed from the view camera ground glass for me, but press photographers have mastered the art of "shooting from the hip" so it certainly is doable.

Don

Source: AOL

Film thickness (1998-06-21T14:45:43)

Al Doyle wrote:

- > Kodak Ektachromes 4mil
- > Fuji HS-U 2.7mil(0.068mm) and 5.1mil (0.130mm)
- > " Com Re 4.2 mil
- > Super HR 2.7mil, 4.1mil, 5.1mil
- > MS-U 2.6mil

Tech Pan is rated at 4 mil.

BUT, I think there is also the factor of material - some flexible (Tech Pan), and some stiff and springy (Agfa Copex Rapid). Most bulk 35mm film comes in 100 foot rolls, Tech Pan, in 150 foot rolls - in the same size film cans.

Don

Source: AOL

Re: Parthenon, Cape Sounion, Elph and Minox in Ath (1998-06-22T06:19:46)

Martin raises again a VERY important point. BE SURE YOU KNOW WHICH TAKEUP SPOOL YOU ARE USING WHEN LOADING YOUR OWN FILM! The 15 exposure spool IS a

larger diameter - picture toward the bottom of the page at -

<http://www.slonet.org/~dkrehbie/2photo/negative/slit/slit.htm>

Don

Source: AOL

Minox print sharpness (1998-06-22T16:05:53)

> > For quality of Minox print, take a look at Don Kkrehbiel's 160x enlargement of tug boat on his site.

CAREFUL guys! The enlargement is only 120x. There are bunch of issues here.

1) Film. The Kiaora shot

<http://www.slonet.org/~dkrehbie/minox/m1a.htm>

was made with Kodak's High Contrast Copy Film

(5069) which, I still think, was sharper than even Fuji Super HR. I suspect that 5069 may have had coarser grain than the HR, which contributed to the added feeling of sharpness.

2) There is NO WAY a silver print will EVER look as sharp as a digital print UNLESS you have mastered the "unsharp mask" darkroom technique.

3) I think (hope) I mentioned when displaying the Kiaora that there was NO WAY I could make a 120x projection enlargement of a Minox negative. The clip in question was scanned, at 600ppi, from a 16x20 print, made on RC (smooth surface & glossy) paper. The message was that the Minox optics could indeed capture a lot of information.

4) That negative was made with my beat-up old IIIs, which has always made super negatives.

5) Camera steadiness - I sometimes carry the IIIs with a tripod adapter, wrist strap, and long cable release wrapped around my wrist. Looks silly, but I can squeeze the cable carefully and not even know when the camera is firing. The 5069 was about ASA 6 so I probably had the camera set at 1/50 sec exposure.

6) Luck. There are other frames on that roll which are less sharp. There are also others which are as sharp, but my experience has always been that some exposures are better than others. I think the little guy inside just feels better sometimes than others.

7) I still harbor the feeling that the way the film sits in the film gate makes a difference, and that film thickness and stiffness are a factor.

8) Depth-of-field. the scale on the camera (every camera) is satisfactory for a specified enlargement factor - the Minox in the range of 3x5 inch and 35mm generally 8x10.

BUT, without the super-fine films, the real potential of the Minox will not be visible.

T-Max does not really exercise the camera. Color film is MUCH fuzzier than

crisp B&W film. Even AgfaPan 25, a wonderful film, is no match for the microfilms for evaluating sharpness.

AND, it is hard for me to believe that there are not minuscule differences between cameras. They are ALL so remarkable that we may be expecting too much from all of them. It is a bit like depth-of-field, the rules of which, if followed, provide "acceptably" sharp images - but very little in the print is really sharp. By the same token, is it not possible for cameras to all be within acceptable tolerances, but differ. After all, Walter Zapp probably did not, in the '30s, anticipate this discussion.

Don

Source: AOL

Re: Minox spools (1998-06-24T06:06:01)

Michael Taglieri wrote:

> .. what is the point of different spools for 15 exposure rolls, anyway?

I don't think (I should stop right there) there is a need on the "count up from zero" models (A & B) since all loads start at zero and you just have to remember when to stop. But with the "count down from 36" models (LX, etc.) the mechanism, at any given counter position, assumes a certain amount of film on the takeup spool. One ought never to need the thick walled spools in a IIIs or B.

Don

Source: AOL

Ilford PAN F Plus (1998-07-10T14:32:15)

I seem to remember some kind words for this film. I just slit some and the initial roll looks nice. What suggestions do y'all have for the development of this film? I bracketed exposures at the harbor this morning expecting 1/500 sec to be the best, but 1/1000 looks nearly perfect for the EV range of 9 - 17.5 (under the pier to bright white boats).

Don

Source: AOL

Re: MRC--Mid Roll Change of Minox cassette (1998-07-11T06:44:26)

MARTIN TAI wrote:

- > MRC in Minox is rather iffy, one may lost many
- > frames of picture when the film is not actually advancing.
- >
- > Any one has similar experience with mid roll change of Minox film ?

YES! In fact with stiff, springy films like Copex Rapid, I have spacing problems in general. I tried some mid-roll changes a couple of years ago doing film tests, and, as I recall, the results depended on the film stock. I just don't do it any more!

Don

Source: AOL

Re: MRC--Mid Roll Change of Minox cassette (1998-07-11T09:18:24)

Peter Zimmerman wrote:

- > The MRC method recommended by Minox and in the Kasemeier books requires you
- > to "advance" film 2 frames after reinsertion of a partially used cassette,
- > presumably precisely in order to take up the slack.

I ALWAYS follow directions! And I DO remember doing this in years past, perhaps I am just gettin too old - or perhaps the camera is too old - but I have had problems in recent years. I do not think the film can "spin" in the cassette since it is always under control of the takeup mechanism and I suspect the friction in the supply side would keep film from slipping forward. BUT, in spite of the "directions" - AND all of the frame counting to get proper spacing, my LX in particular has a mind of its own. Probably sick! -- and this may be the explanation for a lot of the spacing problems - camera malfunction.

I just exposed a roll of Ilford Pan F yesterday in the LX and ALL of the exposures were all "cuddled-up" next to each other, some barely overlapping. The Tech Pan roll just preceding it was fine - or as "fine" as it gets in my LX. I just live with the problem, but MRC, for me, is indeed "iffy". - --and

apparently for Martin also.

Don

Source: AOL

Re: MRC--Mid Roll Change of Minox cassette (1998-07-11T10:24:19)

Oh, my, I AM getting OLD! Of course the film will not "spin" in the takeup side while IN the camera - but when it comes out and the takeup mechanism is no longer holding it, - it spins. I just tried with a 36 exp strip of Ilford Pan F, a rather stiff and springy film, and if half the roll is in the takeup side and the pressure is released, the takeup spool "unwinds" nearly 2 full turns. I also observed that to advance each frame, at that point, takes roughly a quarter turn of the takeup spool - so the "unwinding", if it takes place, can cause one to need to advance the mechanism up to EIGHT (?) times, just to "tension" the film in the takeup chamber.

PLEASE don't nitpick me on the exact number of frames, or where we are in the roll! The point is that the "springiness" of the film - AND the amount already in the takeup chamber, AND probably the thickness of the film, can influence the positioning of the film when reinserting it into the camera.

Also a factor of major importance is whether the takeup spool is tight enough in its cap to prevent all or part of the unwinding when the cassette is removed from the camera. For "relaxed" films, this may be always the case - hence the "factory" suggestion would undoubtedly work - the 2 frames on either side being necessary to allow the light traps to work reliably.

Before you try it with important images, a trial with YOUR camera, and YOUR film, might be wise.

Don

Source: AOL

PMK Pyro film developer (1998-07-13T21:22:47)

As many of you are aware, Rodinal has been my developer of choice for years. It was a substitute for a magic brew of the distant past, "Perfection", which made enchanted images with Kodak High Contrast Copy Film (5069), for which Tech Pan is the poor replacement. I have not seen negatives, or prints, with

that velvet sharpness since their demise.

The first film I have found of the caliber of 5069 is Fiji Super HR (about the same speed - ASA 3-6?). This morning I went out to the wharf to photograph fishing boats in the morning fog. The light was luminous - the fog was only about 100 feet thick so the light was bright and diffused - gorgeous! I loaded the C and B with Fuji Super HR, metered the scenes, EV range of 9-14, shutter speed of 1/30 sec. (confirmed by the bracketing), tripodded each and made comparable exposures.

I was particularly concerned with the ability of the film to render the tonality as everything disappears into the fog from the sharp detail and high contrast represented in the near fishing boats.

I developed the roll from the C with my usual Rodinal procedure. The roll from the B was developed with PMK Pyro. I have been working with it during the past week, so have a fair idea of the time, temperature, agitation, routine I wanted. I prefer the PMK Pyro print. I will not tout this as the perfect developer, but it works with Tech Pan, Agfa Copex Rapid, and the Fuji films, and for me provides prints with greater acuity, less visible grain, and MUCH better highlight rendition. The development process does strange things with the emulsion, such that the prints look Much better than the negatives - although they are gorgeous! I Have now officially terminated my relationship with Rodinal.

Of course Pyro is not new, having been one of the first developing agents used. I have used ABC Pyro (Edward Weston's favorite) but never with small negatives. I have, for years, thought about Pyro as a tool to tame the extreme contrast of the super fine, high contrast, films I like, but Pyro has NOT had a reputation for fine grain. I finally got around to it and am now lamenting the wasted years. The thing that makes this particular developer interesting is that it treats each film type differently - QUITE differently! All kinds of new fun.

I ordered the chemistry from the Photographers' Formulary
<http://www.montana.com/formulary/filmdev/pmk.html>

and when the results were so different, decided I had better get Gordon Hutchings's book "The Book of Pyro"
<http://www.montana.com/formulary/books/bookpyro.html>

I am now trying it with Ilford Pan F and the AgfaPans, although I am not likely to use them - just curiosity. Someone else can try the others.

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-14T15:01:25)

John -

I have been using Gordon Hutchings' recommended agitation for a total time of 6 minutes at around 21 - 22 deg. C. At this time, I have not tried to tweak the development and have adjusted for differences in printing. I can tell you that it is possible to get a good print from a negative that looks TERRIBLE! Also the look of the negative is not necessarily an indication of the appearance of the final print. My first attempt at HS-U is an example at -

http://www.minoxlab.com/DK_DIGITAL/fix.htm

At present I can say that my 6 minute time, and agitation, is not enough for HS-U, about right for Copex, too much for Tech Pan and Super HR. BUT each was printable.

This is just the beginning but I have the best prints I have had from the Minox in years! But be sure that this is NOT a cookbook solution with these films. It is an experimenter's delight with what I think is a worthwhile payoff. And I DO have three "keepers" so far.

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-14T20:44:40)

Joe McGloin wrote:

> I too used to use Hi contrast copy film, but with Ethol TEC. GREAT results is
> an understatement. Has Hi contrast copy gone the way of so many other great
> films? Perhaps I should try TEC with microfilm.

Not a bad idea.

Yes, sadly, Kodak's High Contrast Copy Film (5069) died in the '70s and was replaced(?) with Tech Pan. In order to also replace Solar Flare Patrol Film at the same time (it's called making one film do the work of two, or "downsizing") the new film was given a red sensitivity, a LOT more grain and less resolution. Tech Pan is no match for the old 5069, but Fuji Super HR appears to be! In fact, with the Pyro development, I think Super HR may be better. Super HR when developed with the Rodinal/sulfite combination does show grain in the usual places in an 8x10 print. When developed with Pyro, the grain still appears in the negative, but doesn't print - figure that out!

More about this as I begin to fine tune this combination. I can't "see" any grain in the 8x10s I am making now. It is possible that the greater grain in the 5069/Perfection negative (which has always been my standard) will give the impression of greater sharpness. Of course, the delightful part of 5069 was that it came in sprocketed 35mm format and made exquisite images. Super HR comes in 35mm but NOT sprocketed. Oh, boy, would I like to use this stuff in my Nikon!

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-14T21:36:29)

Michael Taglieri wrote:

> Are you using it as a one-shot? I think in "The Negative" Ansel Adams
> mentions that Pyro has repeatability problems because the part of the
> image that comes from the staining action varies with oxidation, age,
> etc., and also varies with the color of the enlarger light. I believe he
> was reusing it.

The credit here goes to Gordon Hutchings. It IS a one-shot developer, and the best results are obtained by following HIS directions. If it is as good for me as I suspect it is, he deserves my praise and gratitude. I did use ABC Pyro years ago and decided it was not good for my 35mm work. This IS! I am not sure yet of the benefits with the various films, and I suspect that if it is decided that PMK Pyro is the developer of choice, one must then find the film that works best.

There are several things about the processing cycle that are critical and I

found the book a very worthwhile investment. But I am committed to the exercise.

I did find some discussion of Pyro and PMK Pyro by using the words to search Yahoo.

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-15T11:10:10)

MARTIN TAI wrote:

> Is the Fuji Super HR + Pyro = 5069 + Perfection >

Too early to tell. The Pyro doesn't eliminate grain, it just creates a stain that masks it. Whether this lowers the apparent sharpness is not clear at this time. I have only made 8x10s and will try an 11x14 of a very soft foggy scene this afternoon. I do think the highlight and shadow rendition is MUCH better!

> As William White stated several times in his book that the Minox B
> COMPLAN lens with curved film plane is better than flat film plane
> MINOX lens .

Oh, I have already done that experiment and confirm that the Complan is sharper, IF you are using a film that can show the difference. BUT, I also have always had FITS trying to dodge out the dark corners I get with the Complan vignetting in certain light conditions. This doesn't happen with the Minox lens and that is a blessing. So I am torn as to which I like the best. Certainly the added sharpness of the Complan would never be seen in a gallery setting and with the kind of images that exploit the 8x11mm format.

> Since the difference in COMPLAN vs MINOX is a documented
> difference, B + pyro may have had unfair advantage vs C + Rodinal
> Of course, grain has nothing to do with lens, but perceived
> acuity and contrast may have something to do with lens.

I think I did compensate in my judgment for that phenomenon. The Rodinal images (a number of them) give me (sometimes subliminally) the "Indian sand painting" feeling. With the Pyro, I get the velvety, creamy feeling. One that I am looking at has an almost lithographic (I guess that's the word) look.

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-15T11:11:24)

Frederick Greenspan wrote:

- > I tried PMK a few months back on 35 and 6x9 cm with my b&w standard
- > Delta Pro 400. The part that turned me off was having to use
- > non-hardening fixer, which I did. The negatives seemed to scratch very
- > easily, even with careful handling.

I have never had a scratching problem even though I always use Kodak's Rapid Fix and NEVER add the hardener (sulfuric acid). For the Pyro negatives I have been using the Photographers' Formulary TF4 Archival Rapid Fix for exactly 30 seconds. Gordon Hutchings states that the Pyro does harden the emulsion, minimizing any possible damage.

- > The results didn't impress me
- > significantly over what I already get with the same film and Xtol. So
- > I'm back to Xtol and a fixer with hardener. I use this combo for my
- > Minox as well, I just don't dilute the Xtol for the Minox.
- >
- > Just another point of view. Regards!-Fred

And a valid one! I, too, see no advantage with films the likes of Delta Pro 400. The point of my initial experiment was the ability of Pyro to deal with highlight tonality - something the high contrast, short range, super fine films find difficult. The whole idea was to tame the shoulder of Tech Pan and get expressive highlights in the area of the curve where dy/dx is approaching zero. The bonus was discovering the combination of Fuji Super HR and PMK.

Please don't misunderstand, I am not touting PMK Pyro as the ultimate solution, in fact I am just now trying some comparisons using Ilford Pan F and the AgfaPans. I DO love indian sand painting - as an artform - but I personally don't like the look in my B&W work. I carry the Minox, not for its own sake, but to be able to capture images when no alternative is available. If there are materials which allow me to make and display B&W prints which I like, I will use them. This morning as I came over the hill to the harbor,

the sun was just hitting a fishing boat that is 98% dull brown rust. The perfect light made the stern of the boat glow bright orange and with the reflection in the still water, I almost drove off the road. I had my Minox, but I needed the 35mm with Kodachrome! NUTS! Tomorrow morning I will try to defy the rule that you can't go back!

The point of all of this is that IF you are interested in fine, sharp, relatively grainless, expressive prints with rich shadows and lovely highlights, and if you normally don't carry a 4x5 or 6x6, or even 35mm, this combination may be worth exploring. I always carry a small tripod in the trunk and have been using it in the fog. This morning a fellow approached with a huge camera bag, Canon something-or-other, and in wonderment asked what was that thing on my tripod. I love it! I made some wonderful exposures of reflections in the water that don't happen often, and the total cost for film and developing will be about thirty-five cents. The printing is another matter!

BUT, my prints from the Fuji Super HR and PMK Pyro are not far off my standard for 35mm with Tech Pan, and the tonality, I think is better. Since my initial experiments with the T-Maxs and Delta Pros in 35mm were less satisfying to ME, I am happy as a clam!

And the Pyro is giving me better results than the Rodinal I have been using.

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-15T12:26:39)

Joel Moskowitz wrote:

>

> Don,

> what is the ASA of Fuji Super HR ? I use the Delta pro 400 because it's

> nice high speed film. I don't like techpan because it's slow and because

I guess I should start with "I don't use a Minox the way most people do." I do often use high speed film, but most of my Minox work is trying to learn to see, and print. The short answer to your question is three, or six. Using the Zone I 0.1 above film base plus fog method, Super HR is ASA 3 with Rodinal and sulfite. I set the C at ASA 6 and get nice negatives. On a sunny day (f/16 Rule type light) the Minox works well at 1/60 sec. In the fog this

morning, 1/20.

If Tech Pan is too slow, tune out now! There is no free lunch. AND, I suspect that there may be little advantage with the likes of Delta Pro 400 as Fred Greenspan just mentioned.

Don

Source: AOL

Anso Lancer Camera (1998-07-16T12:21:55)

Sorry for the digression but a fellow just asked me about an Anso Lancer Camera which takes 127 film. Anyone have an idea where I can aim him for answers?

Don

Source: AOL

chromogenic B&W films, was A Wedding Tale (1998-07-16T13:13:40)
Michael Goldfarb wrote:

> And yes, folks on this list have used chromogenic films like XP2 in
> their Minoxes with really great results: Take it way, Don, Pete, John,
> Godfrey, et.al!

I have had excellent results from both chromogenic B&W films. They do produce different images - a bit about both at -
<http://www.slonet.org/~dkrehbie/2photo/negative/film/test.htm>

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-17T11:15:51)

I have just posted the beginning of a PMK Pyro section with a couple of images at -

<http://www.slonet.org/~dkrehbie/2photo/negative/film/pyro.htm>

I just can't describe the quality of 8x10s with the Super HR - PMK combination. I DID make a 16x20 (dumb idea) and think the limit of the Minox optics have been exceeded - but I guess it depends on the subject and how far away you are. No appreciable grain, sharp, but certainly not "crisp".

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-17T22:07:44)

John Brubaker wrote:

> How did you arrive at the 6 min. time for the micro films?

I threw 20 sticks in the air and 6 came down. Oh, no! I think I halved the AgfaPan 25 time as a start. My temperature has been all over the place due to the nutty weather, ranging from 21 deg C to 22.5. Also the first negs were made on a foggy morning with an EV range of 9-14. I just did a roll yesterday of the sunny morning where the range was EV 9-17.5 and developed for 5 minutes. The interesting thing is that the negative can look terrible and still print well. VERY strange. I'm counting on you to help with the "tweaking".

Don

Source: AOL

Re: Minox neg carriers (was: scanning...) (1998-07-18T10:13:31)

Another alternative. I used my film slitler to make an opening in a piece of exposed 35mm film, then taped the 35mm film in a spare film strip carrier. The Minox negative strip fits perfectly (obviously) and is completely masked. My Minox scans are now MUCH better. Godfrey made me do it! - by suggesting that masking was necessary - thanks Godfrey!

Don

Source: AOL

Re: New Use of THICK SPOOL in Minox Cassette (1998-07-21T20:53:36)

MARTIN TAI wrote:

> The 11.2 spool is the preferred spool for use with long loads of 2.5 mil film.

Good show, Martin! I just got some 2.5 mil film and you have saved me considerable aggravation.

Don

Source: AOL

Re: color to B&W (1998-07-22T06:55:46)

Godfrey DiGiorgi wrote:

> Color negative film is much sharper when developed in its native, proper
> chemistry. The photos of the Gate Post in my "San Simeon & Mission San
> Miguel" presentation demonstrates the quality that can be achieved with a
> little bit of custom filtration to make the grayscale response of the
> color film match a good B&W film, and with a scanner you have no problem
> at all with the crossover mask.

A perfect example of the delight of digital photography. The computer makes the conversion far better than the opto-chemical process. It is a delight to get back a batch of Kodachrome slides and have a beautiful 8x10 print on the wall in an hour. One keystroke can convert a Kodachrome file to a beautiful B&W.

On this topic - a friend called Sunday and said he wanted to show me his new slide scanner. He arrived with a little triangular plastic box. Inside were two 3.25 x 2 inch mirrors at right angles to each other. I produced a slide, he put the slide on the flatbed scanner and placed the little "pup tent" over it and in moments we had a REALLY good scan of the slide. The maximum resolution of the flatbed scanner is 600ppi, so the file size can only be roughly 600x900 pixels (less than a 2700ppi scan of a Minox negative -850x1169) more than enough for publishing in the internet and better than a 480x640 digital camera. This little bit of plastic came with his new HP scanner. Unfortunately we couldn't make it work with color negatives because the orange mask confused the software which sees orange as the complement of blue. Evidently the negative/slide scanners have software that recognizes the orange mask of color negatives. Anyone have experience with this?

BUT converting to B&W and using "Adjust Levels - Auto" should be an interesting exercise.

Don

Source: AOL

Re: color to B&W (1998-07-22T08:47:32)

Michael Bower wrote:

- > Assuming you find the software that will work with a flatbed scanner and
- > the "pup tent" device:
- >
- > Which would probably be better? Scanning the 4x6 print from a negative
- > or scanning the negative.

It all depends on the pixel count.

There is no question that the closer you are to the original, the better - BUT, scanning a 4x6 negative is VERY expensive and excellent quality flatbed scanners are now under \$200. It's all about pixels! To get a good digital print from the likes of an Epson printer, you need 2-300 ppi (I generally use 300ppi files). You can work backward and decide how many pixels you will need to get the size print you want at 300ppi. For Minox negatives, even scanned at

2700ppi on a very expensive "slide" scanner (850x1169 pixels) the arithmetic yields a 2.8x3.9 inch print at 300ppi. Your 4x6 inch print scanned at 600ppi produces a 2400x3600 pixel file, which at 300ppi gives you a 8x12 inch print. Is something lost in making the print - YES! Do you need a really good 4x6 print - YES! Only you can decide what meets YOUR standards, but a \$200 flatbed scanner is a heck of a lot less than \$1500 film scanner.

If you wish to scan a 35mm negative using the "pup tent" on a flatbed scanner (600ppi max.), a 4x6 print will have four times the linear pixel count and that makes up for a LOT of "second generation" loss.

Don

Source: AOL

Re: broken minox cassette (1998-07-22T20:10:07)

Bill Hoy wrote:

>

> Here's a quick question. I loaded some slit film into a minox cassette, but
> when I was taping the spool into the takeup side, I snapped the bridge of
> the cassette. Is it still useable for this roll

I have used a "super glue" to stick cassettes back together. I think some are still around. Very little should hold the cassette together forever. Some of the CA glues used for model airplanes come with very fine applicators, so that this time with film already loaded you can avoid disaster.

Don

Source: AOL

Re: Minox Exposure Chart (1998-07-22T20:37:15)

C'mon, guys! The whole idea of a series is consistency. Yes, of course the series starts with 1 and is increased by one for each new value. Martin is correct in his assertion that the series is represented by the powers of 2 FOR THE COMMON CURRENT f/stops he lists. BUT that ignores the intermediate f/stops such as 4.5, 6.3, etc., which were common earlier. I ran the whole series at -

<http://www.minoxlab.com/dk051597/dkexp.htm>

I got into this when I wondered what the 1/3 marks really represented in film speed scales, and shutter speed scales, and f/stop scales.

Martin is absolutely correct that f/5.6 is f/5.6 and not f/5.7 - IF one starts rounding at 1.414..... (the square root of 2) Indeed it was probably appropriate in the BC (before calculator) era - but spreadsheets make it much easier to be precise. Now the only question is whether the manufacturers of the lens put the f/5.6 mark at f/5.6 or f/5.7.

Talk about trivia!

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-24T10:41:09)

John -

I have been developing at ABOUT 72-73 degrees for 5 minutes and having to add magenta in printing. BUT, we have not seen the sun since I started this so the EV range is somewhere around 9-14. I haven't had a chance yet to try the good ol' Yosemite range (EV 7-17.5) yet. You should get a printable negative at either 5 or 6 minutes, as I think the density buildup is rather slow???

Your idea of the IIIs for fine B&W film and the LX for color or chromogenics is exactly right!. The LX cannot make full use of the "super" films and the faster films can't tell the difference between lenses. Perfect match! I'm counting on you to help fine tune the Pyro - AND even further, help decide whether it is worth the effort. So far, I THINK it is.

Don

Source: AOL

Tech Pan and PMK Pyro update (1998-07-28T14:46:11)

For those interested in this combination. I exposed a roll of Tech Pan this morning in the early morning sunlight reflecting off the white fishing boats. EV range was from 11 through 17 plus. This was near axial light, so there is no deep shadow. If I set my Pentax EV 11 at Zone II, EV 17 is at Zone VIII, and aligning f/3.5 at a 1/500 sec., I read an ASA of about 40 for the film-developer combination - IN THIS LIGHT! This is consistent with my usual setting of the C at ASA 50 with Tech Pan for automatic shooting.

I exposed at 1000, 500, 200, and 100. Just finished developing in PMK Pyro according to Gordon Hutchings' instructions - 72 deg. F, six (6) minutes. The deepest shadows under the pier (EV 11 placed at Zone II) and are nearly clear (slight density) in the 1/500 sec. negative, which prints perfectly on Ilford Multigrade IV RC with white light.

My experience with PMK Pyro has been to develop for 5 minutes, requiring the addition of magenta during printing, so 6 minutes may be closer to the mark - AT 72 deg.

I'll bet the Fuji Super HR and Agfa Copex develop about the same - but we'll see.

Don

Source: AOL

Re: Tech Pan and PMK Pyro update (1998-07-28T20:28:55)

Bill Hoy wrote:

> I assume that the addition of magenta means the five minute development time results in a lower contrast negative.

Right! The negative is a bit soft. As I mentioned this morning, 6 minutes brought the Tech Pan to a perfect (for me) density range. In fact, yesterday I made Minox, 35mm, and 6x6cm negatives of the same scene. Tonight I printed the Minox and 35mm, and, while the Minox was a tad soft, the 35mm was perfect at 5 min.

> What's your method for enhancing the stain? Do you dunk it back in the used
> developer after fixing or use the chemical (I forget the name) method.
> Seems that any alkaline bath after fixing should work, but I haven't tried

So far I have just been following Gordon's directions exactly and using the used developer. There does not APPEAR to be any stain with Tech Pan (each film stains differently - HS-U the most), but it sure prints pretty! In fact, the 35mm prints are, I think, equal to or better, than those from the HCC film and Perfection that I loved so.

Don

Source: AOL

Performance of the various Minox lenses (1998-07-30T18:51:51)

There IS a difference between the "Complan" and "Minox" lenses.

Is it evident with most films? NO!

Is it evident in most hand-held situations? NO!

Is one better than the other? Hmmmmmm.

The Complan lens, with its curved film gate, does provide "crisper" images, IF there is no camera movement, AND IF the film is adequate to record the difference. My first experience with the difference came with my LX in the

High Contrast Copy Film days. I noticed that detail did not seem to have the "edge effect" I was used to from the IIIs. A tripodded test confirmed the fact. The C reconfirmed it. I have just completed a three camera test with a really sharp B, a "Complan" C, and a "Minox" C - using Fuji Super HR and PMK Pyro. Can I see the difference? Between the two Complan lenses - NO. Between the Complans and the Minox - YES. I can feel it as well as see it. I somehow want to look again at the print from the Minox lens to make sure it is sharp. With the others, I don't.

I must note here that I spent a good part of my life with progressive myopia, with which new glasses brought a feeling of euphoria and everything was sharp and crisp. Time caused the effect to diminish until the next correction. I am therefor VERY sensitive to the "feeling" of sharpness, and I get it from the Complan lens, not the Minox lens. I also photograph almost entirely outdoors where even a 35mm camera is considered inadequate by many of my colleagues. I also consider Tech Pan a barely adequate film for Minox work, and a poor substitute for its predecessor. With 35mm, it is merely adequate.

Does the Complan lens have a down side - YES indeed! Under various lighting conditions, it vignettes! The darkened corners are nearly impossible for me to dodge out if there is delicate tonality in the region. I would rather have a tad less crispness than the dark corners IN SOME SITUATIONS!

Is the difference between the the two enough to influence a decision one way or the other? Probably not. If I used any film from AgfaPan 25 on up the "grain" scale, I would probably prefer the later "Minox" lens to eliminate the vignetting which can be very irritating in a bald sky or blank wall (which of course you should avoid anyway).

For my personal B&W work, the Complan lens is preferred. For color work I always use the LX with the Minox lens.

If I had a choice of only one Minox? It would be an LX (or "Minox" C), or perhaps 2 ECs, one pure and one modified for infinity. If I could have two, I would add a "Complan" Minox

But all of this has to do with print size. The above mentioned three camera test was evaluated with 11x14 prints, which were virtually grainless, but NOT crisp. Having enlarged past the threshold of enlargeability, the differences

were exaggerated. That led to a question I had pondered for some time - that of the maximum print size for a 8x11mm negative such that it was essentially indistinguishable from a similar print from a 35mm negative. The answer at present, is - smaller than 6x8. I exposed a 6x6cm, 35mm and Minox negatives, developed then identically and am making 6x8 prints therefrom. At 6x8, the 35mm print has a fineness of line and tonality that is a beauty to behold. The "Minox" print, by itself would be gorgeous, but next to the 35mm is much "heavier" feeling, and although very sharp, does not have the "three dimensional" and "transparent" quality of that from the larger negative. So, what's new about that?

I am going to repeat this experiment using Tech Pan in the Nikon and Super HR in the Minox.

John Brubaker is absolutely correct, this is NOT the way most people use their cameras, and certainly not the use to which most Minox put. I would almost always use a larger format - IF AVAILABLE - but enjoy having the best possible quality when it is not.

As Godfrey and Pete have pointed out, it is not ONLY about sharpness, and the 35mm vs 8x11mm comparison illuminates that clearly. Some of you may have had to do the egg on the white sheet in axial light exercise in photography class.

The masts on the boats have that "axial" tonality in the 35mm example - and not in the 8mm. It takes a lot of "pixels per inch" or silver grains to produce that effect.

Don

Source: AOL

Re: Minox lens quality (1998-07-30T18:53:44)

Frank & Terri Snodgrass wrote:

I do not think you will see any difference in quality. Let me know what you think

Agreed, As per my long winded dissertation on the subject, the Minox people knew what they were doing and created a new lens without vignetting, curved film plane, and indistinguishable in quality for the the then current and probable future available films. The reason I have never discussed this issue it that it is in reality a NON ISSUE! I just happen to like the differences.

They are useful for MY work.

Don

Source: AOL

Re: Tech Pan and PMK Pyro update (1998-07-30T18:55:28)

John and others

I am violating all kinds of "rules" here. I just started making negatives, developing them in PMK and printing them. I liked what I saw. I haven't done my homework to see if the range for Tech Pan is extended (I suspect it is not), and I haven't plotted the curve (shame!) so I don't know what it is technically doing with the highlights. I DO know that Tech Pan shows very little, if any, staining, but I think the grain is less obvious on the print. I AM using Multigrade IV RC for these tests, and that is touted as a plus with the PMK negatives.

I did use TD-3 when it first came out several years ago and for me got too long a toe. I like a curve that jumps up quickly for good shadow separation, and the TD-3 looked a lot like the Technidol Liquid - nice shoulder, but too slow in the toe.

I first used the PMK with Fuji Super HR and got what I thought was much nicer tonality than with Rodinal. Oddly, I think the Super HR has a better range than Tech Pan, but again haven't done my homework. Maybe I'll just let someone else do that stuff from now on.

I get the feeling that this Pyro is a VERY personal thing, so am not surprised at your comments. I also have the feeling that perhaps film selection is the key to Pyro success, and probably Tech Pan is not the best choice. I'm starting to play with 35mm Tech Pan in a N+2 and N+3 situation with the PMK and the initial results look promising.

The one thing I like about Tech Pan in a roll film camera, is the ability to use selenium toning to enhance the contrast. I can get up to N+2 with Tech Pan developed in Rodinal. That allows me to develop a roll with a variety of lighting conditions to the lowest CI and bump individual frames up to 2 stops. I don't know what a Pyro developed negative will do yet. That could have a serious effect on my choice.

Don

Source: AOL

Re: Tech Pan and PMK Pyro update (1998-07-30T18:56:29)

Bill Hoy wrote:

> What agitation technique did you use for pyro and tech pan?

Gordon Hutchings recommends a quick invert each 15 seconds for PMK. No problem with the Minox tank since I have never had a problem with uneven development - my "drum" is essentially a Minox design, scaled to fit in a standard 250cc Nikor tank. With the 35mm tank I used your MARVELOUS idea of using a 500cc tank with 250cc of solution and doing the quick invert as well. Hutchings recommends the quick snap because it traps the air in the top of the can, which then bubbles up through the film like a nitrogen burst. With the larger can, of course the developer just drains away. The idea is to minimize uneven development and the half-full tank is the best idea since stepping on grapes.

I think of you Bill, every time I develop a roll of 35mm film. Your technique works flawlwssly and I have even relegated my 35mm "drum" to the garage. Thanks again!

Don

Source: AOL

Re: H&W film developer (1998-08-10T20:54:21)

Per -

My definition of film speed hinges on the Zone I density of 0.1 above film base plus for. I like a developer that has a short toe. I have found that a number of developers (Technidol, TD-3, POTA, etc. have a fairly long toe, with a gradual rise to Zone IV. Rodinal with sodium sulfite gives me a rather abrupt rise from zero (nearly a straight line from .1 at Zone I to 0.8 at Zone V.

That said, I get an honest 0.1 above fb+f when exposing Zone I at ASA 25, measured with a Pentax Digital Spot meter. I have not found any developer that increased the Zone I density without also moving the shoulder downward also.

It is easy to expose Tech Pan at ASA 50, or even 100, IF the luminance range is short enough. I generally set my auto-exposure Minox at 50 for Tech Pan, since when metering a gray card (which is what automatic

cameras basically do) a six stop luminance range is generally assumed.

Don

Source: AOL

Re: H&W film developer (1998-08-11T06:44:55)

Michael Taglieri wrote:

>

> >That said, I get an honest 0.1 above fb+f [***] when exposing Zone I at ASA 25, measured with a Pentax Digital Spot meter.

Sorry 'bout that! I was referring to Tech Pan with my Rodinal - sodium sulfite routine. Without the sodium sulfite (as with my experiments with Technidol, TD-3, etc.) the curve rises a bit more slowly, that is, the curve is a bit more concave with somewhat less density at Zone II and III. But remember - these are MY results!

I haven't plotted the curve for either H&W or PMK.

Don

Source: AOL

Re: New Minox User. (1998-08-11T07:23:55)

Michael Taglieri wrote:

> Am I right in assuming you mean Fuji Reala is the finest grain in its
> speed range, or do you really mean finest of all? I'm somewhat
> dissatisfied with the grain of Minox Pro (which is Reala, right?) and was
> thinking of making a slitler so I could try slower films, such as Kodak
> Ektar.

Mike -

Minicolor Pro is about as good as you're going to get with a Minox AND color film. The question of grain in color films is a tough one when the technology gets were it now is. I have used both Fuji New Reala and Kodak Royal Gold 25 (which I am told IS today's "Ektar") I did some comparisons a while back and, although the low res images are not the best way to compare, perhaps you can

get a feel for the differences.

<http://www.slonet.org/~dkrehbie/2photo/negative/film/color.htm>

I am concerned that some of us may, in our excitement, have created unrealistic expectations. The Minox WITH the new super films, does give spectacular results - BUT do NOT expect 35mm results from a negative 1/3 the size! I have just finished looking at some contact prints of the building of the Union Pacific Railroad, from 10x13 inch glass plates. As my Aunt use to say "You can see the bugs on the bushes!" - across the canyon!

One way to tell if all is well with your film selection and your Minox is to take the BEST camera/lens you have, tripod it and make the best negative you can. Then look at an 8x11mm section in the center. Your Minox should give you better resolution, but the film characteristics should be similar.

I am developing a roll of Kodak Royal Gold 25 this morning to see if, as I have been told, the saturation is better than Reala. I'll let you know.

Don

Source: AOL

Poor Don (1998-08-13T08:05:16)

MARTIN TAI wrote:

- > Don spent a life time in pursueing item c) Negative resolution (film, developer, technique), testing all kinds
- > of film and developers. And he probably never pay attention to
- > d) Enlargeing lens resolution.

- > The R word comes back and haunted him.

Thanks for telling me that my life's work has been compormised by inattention to such a simple detail. I will forever be haunted by the knowledge of how much better my work would have been, had I purchased a Minox enlarger.

What empirical evidence do you have, using the two systems, to validate that your theory makes a visual difference ON THE PRINT?

Don

Source: AOL

Re: Minox negative storage (1998-08-14T19:19:38)

David-

I, for years, divided 35mm archival page slots in half with a Seal Tacking iron (on high). As Steve said, a model airplane covering iron, or as Pete suggested, a soldering iron (properly set) works well. You will have to find the correct temperature - hot enough to fuse the material, but not melt it. I now use "Print File" Archival Preservers 120-3HB sheets for 120 film and divide each column into three Minox columns. Each slot (column) can hold an 18 exposure length of Minox film. The Minox negatives can then be filed with 35mm negatives or even slides, by subject - or whatever.

Don

Source: AOL

Re: Print quality as a function of the enlarger le (1998-08-15T06:42:05)

MARTIN TAI wrote:

- > Don,
- > With higher res camera lens you may capture thinner
- > ropes, or even resolves the strands which make up a rope, hence
- > you get sharper image.

Of course you can - I thought we were talking about ENLARGER lenses!

- > Grains and grains are like a sampling grid, it must be smaller
- > than any part of image, it probably need a minimum of four grains
- > to form the smallest dot.

You're making MY point - if the grains are sharp on the print, then any IMAGE fuzziness is the fault of the taking camera or film/developer

- > Enlarging lens always makes image on negatives, fuzzier.
- > The sharper the enlarger lens, less the fuzziness, but always not as sharp as the image on negative.
- > Don, don't assume projector lens passes 100%, there is always lost.
- > Better lens project CLEARER image, including crisper grains/

No problem here - but I suspect, in the center part of the field (lens) less than you think.

- > Higher resolution lens makes the transition less gradual, ie, the slope will be more steep.
- > If there is a "perfect" lens, then the edge would be sharp as knife edge. .

Now you're talking about the "taking" lens again! Once the grains are developed and the film dried, it is hard for them to migrate into a line from the rather random arrangement I see in the grain magnifier.

- > How about replace the Micro-Nikkor lens you are using with some
- > lens which you know are not that sharp. Make a print with the
- > same rope negative and examine the edge of letter A, you will
- > see that the boundary becomes wider, and fuzzier.

I did that YEARS AGO, and the results were as I am describing - if the "grains" are sharp (AND the contrast adequate), the enlarging lens will NOT rearrange the silver and sharpen the image! That little parenthetical comment is perhaps more important than resolution. The appearance of sharpness is greatly enhanced by contrast - which I suspect is what you are seeing and attributing to sharpness.

- > After that borrow a Minox enlarger and make some test

I am.

Don

Source: AOL

Re: Enlargeability as function of camera, film, enlarger (1998-08-15T07:36:33)

MARTIN TAI wrote

:> ENLARGEABILITY AS FUNCTION OF Camera Lens, film+soup, and Enlarger lens.

Enlargeability depends on camera lens, film,soup and enlarger lens.

> A) Picture taken with Minox, enlarged with Minox enlarger Super HR micro film provides best result, up to 9x12" high quality enlargements can be made, which when viewed at normal viewing distance (10") looks as good as from 35mm camera.

NO WAY! These kinds of statements only serve to unrealistically elevate expectations and create disappointment. THERE IS NO SUBSTITUTE FOR NEGATIVE

SIZE! I have done this and, IF you are critical in your evaluation, the difference is VERY evident. To the casual observer, in a gallery, with the prints behind glass or Plexiglas, your Minox print will pass, but put it next to the 35mm print, and the difference TONALITY and feeling of crispness is visible if not glaring. The only film with which this can be tested is Tech Pan, since it is the only film of this type available in perforated 35mm. I will concede that if viewed far enough away, the difference becomes, first subliminal, then invisible - BUT at 10 inches - NO WAY! Even with a 35mm Tech Pan negative and a Super HR Minox negative, the difference is visible.

If there is no difference between a print from a 35mm negative and a Minox negative, one should certainly suspect the 35mm technique.

When discussing enlargeability, ones expectations and threshold for excellence become governing factors. It IS true that viewing distance is critical, but content and printing technique are also major factors.

I just happen to be able to see a difference between the various films, developers, printing papers, etc., and if I had my choice, I would use an 8x10 view camera and make only contact prints. I HAVE 6x8, 8x10, 11x14, and yes, 16x20 prints on my walls from Minox, 35mm, and 120 negatives. There IS a difference, and it IS clearly evident even when just walking by. True, the 120 negatives were not printed with the Micro Nikkor (a Schneider Componon), but there is a persistent "feel" of "fineness" in the prints from the larger negatives. It IS true that many of my favorites are from Minox negatives, and they would never have come to life were it not for the Minox, BUT - THEY ARE NOT OF THE TECHNICAL QUALITY OF THE PRINTS FROM LARGER NEGATIVES - PERIOD!

To compare the technical quality of prints from various film formats is NUTS! They are different and serve different purposes. The wonderful thing about the Minox is that it IS always handy and is capable of making a fine print - UP TO THE STANDARDS SET BY THE PHOTOGRAPHER! Those standards may be 6x8, 8x10, 11x14, or even 16x20. BUT it is the threshold of excellence OF THE INDIVIDUAL PHOTOGRAPHER that sets the enlargeability limit!

> B) Picture taken with Minox camera, enlarged with Micro-Nikkor as enlarging lens. Regardless how fine grain the film or what kind of developer the best one can get is good 6x8". (If I remember correctly this had been confirmed by Don's Super HR + Pyro experiment vs techpan, ie, still 6x8")

Depends on what you mean by good! Actually it is not the resolving power of the Minox camera that starts to degrade the image, as much as the lack of grain density which produces the fine tonality.

> If your are using a 35mm lens as enlarger lens, it is not worth while to pursue ultra fine microfilm or exotic developer for the purpose of getting quality enlargement passes 6x8", as the enlarging lens becomes the limiting factor. The fact is , there is no visible improvement when moving up from Techpan to Super HR in terms of print size.

Please, if you are going to make statements like this, don't use my name. I am using a 35mm camera lens for enlarging, and there IS a difference in the quality of the prints. If there WERE "no visible improvement when moving up from Techpan to Super HR in terms of print size" it would be SOLELY because of the negative size NOT the enlarger lens. It is all about PIXEL COUNT! Less silver per square inch, less detail - simple as that.

> C) Unless Super HR or Techpan film is used in Minox camera, whether the enlarging lens is a Minox or a general purpose enlarger lens for 35mm format (for example Beseler),makes little difference. This explains why some people see no differece in Minox enlarger vs other enlarger. The result of high resolution lens manifest only when high resolution micro film is used.

This statement has merit and is precisely why I have been slitting film for years.

BUT I still want to know how, if the grain ON THE PRINT is sharp, the image edges can be improved DURING THE ENLARGING PROCESS?

Don

Source: AOL

Re: Print quality as a function of the enlarger le (1998-08-15T12:08:28)

I think all is well, thanks to responses from those who have extensive PRACTICAL experience with BOTH types of enlargers. Pete's comment about grain being 3 dimensional is, of course, correct. There is a "sweet spot" in the range of "grain sharpness" at which point the image appears most clearly defined.

Fortunately, as Pete points out, my 55mm Micro Nikkor at 2 feet (which is roughly in the range of 8-9x), has a depth of field in the range of 13/32 inch - even at f/3.5. I am not technically oriented, so am not sure of the significance thereof, but it does give me some comfort in that, when I print, I am at least doing justice to the negative.

End of topic! (..as far as I am concerned.)

I was interested in the Biography of Geo. Eastman that Edison began making film for his new movie camera by taping Eastman's film together to make long lengths. Eastman and Edison apparently got together and Eastman suggested that taping film together was dumb and he would make long lengths for Edison. They apparently agreed on a 1 3/8 inch width and Eastman put sprocket holes in it. The width eventually became "35mm".

Don

Source: AOL

Re: AL's new sub-group on Yahoo (1998-09-11T07:47:14)

KNOCK IT OFF GUYS!

I am interested in any bit of information that will help improve, or make more enjoyable, my work. I have learned something from everyone in this group - including Al and Martin. What is not useful, I use to keep the DELETE button

working smoothly. I, personally would prefer too much information to too little, and can tolerate opinion as well as any one. My recent irritation was the result of being cited, by name, for inferior practice. I, for one, welcome Al's contribution and if it weren't for the cookie business would watch. I have spent 70 plus years listening to people belittle suggestions - even IBM when we told them in 1964 that 2 digits was not enough for the year in their new operating system.

As I have quoted before my Grandmothers favorite admonition when I grumbled - "If you can't say something nice, don't say anything." If I ever violate that bit of wisdom, y'all have my permission to remind me of my transgression.

I must add that silence on my part is not always because I have nothing nice to say. I tend forget about partially composed pieces, or just loose items to which I should respond. Michael's fine images are a perfect example. I want to provide an adequate response, but get sidetracked and never get back to it.

I certainly have faults, as does Al, perhaps he is trying to do too much, but his passion is not in question. He represents one facet of this business, and appears to me to be a pragmatist. He certainly knows more about all of this than I do, and if one of his suggestions results in a new opportunity, great. I wonder if someone other than AA had suggested selenium toning negatives, we would have accepted it immediately.

Don

Source: AOL

Re: Agfapan 25 is Minopan 25!! (1998-09-11T18:56:52)

Richard Lahrson wrote:

>

BTW, is Agfapan 25 available for my Rollei TLR in 120 size as well?

Absolutely - use it all the time, lovely stuff, but check the exposure with YOUR development technique and equipment before you do anything critical. It needs careful exposure - at least in my experience.

Don

Source: AOL

Re: Agfapan 25 is Minopan 25!! (1998-09-11T21:36:09)

XKAES@AOL.COM wrote:

> >BTW, is Agfapan 25 available for my Rollei TLR in 120 size as well? >>

> It's only available in 35mm. There is a post in the NEWSTAND about this.

120 is listed in the June 1998 B&H catalogue AND the latest Freestyle catalogue.

Don

Source: AOL

Re: Agfapan 25 is Minopan 25!! (1998-09-11T21:41:30)

XKAES@AOL.COM wrote:

>

> Please trash my last message. Agfapan 25 IS available in the 120 size.

Sorry - I should have read the second message before responding.

Don

Source: AOL

Re: Minox b/w 100-speed film report (1998-09-13T07:27:38)

I have finally gotten around to reading your treatise on 100-speed film. The only excuse I have is that I have reached a point in my life when memorial services seem to dominate the schedule.

Outstanding Michael! EXACTLY what this is all about. The thing that makes this all worthwhile is that YOU have done the work and judged it according to YOUR standards. I see no need to illustrate your comments since 72ppi is inadequate for comparison and indeed printing technique and subject selection mask many of the features you describe. Your discussion performs the function of enticing me to try your film selection and process. Good Work!

Don

Source: AOL

BIG "submini" (1998-09-15T11:33:55)

Sorry if this is not on "subject" but to me it is a "submini" view camera. I have just found an absolutely gorgeous 6x8cm Graflex, with roll film back and three film holders. The beautiful leather case looks and feels new. Anyone have experience with this machine, or suggestions as to where I might find a manual or book.

Don

Source: AOL

Re: BIG "submini" with a triplet (1998-09-19T17:03:19)

My experience with less than "quality" lenses has been limited to the last few days when I have been testing my "new" Century Graphic (2-1/4 x 3-1/4) with a Graflar, 103 mm, f/4.4, Triplet: 3 element lens.

I exposed 7 frames of Tech Pan film at f/4.4, 5.6, 8, 11, 16, 22, and 32, trying to maintain the same negative density for each. Tripod naturally.

f/4.4 and 5.6 negatives are bloody awful! f/4.4 REALLY fuzzy and f/5.6 just really fuzzy.

f/8 begins to look civil but would probably still be soft with Tri-X.

f/11 is the first negative with any clarity, but still UNacceptable.

f/16 Eh! Not good, not bad.

f/22 is quite sharp and is the first negative I would consider adequate for a 16x20 print.

f/32 is also fine.

The assessment was made with a 6x8 portion from the center of the image enlarged to make a 16x20 print. My guess is that the edges will also be OK at f/22 and 32. INTERESTING. The differences are quite pronounced, more than I have ever experienced with Leitz, Zeiss, or Nikon lenses. Actually, the usefulness of f/22 is probably OK, since the depth of field for a 100mm lens is quite short, and the diffraction limit is 6x or just slightly less than a 16x20 print. Not a bad aperture. Now I have to find a film that is fast enough to work at f/22.

If this is what you are talking about, I would agree that "triplets" are bummers. They should have called this one an f/11 instead of f/4.4. Perhaps

for Tri-X and newspaper work the larger apertures would suffice, but there are those of you that know considerably more than I about that.

My guess is that I will try to find a slightly wide, 75-90mm "quality" lens for this neat "little submini view camera".

There IS a connection to "submini" photography here. I have become so accustomed to working with very fine films in 35mm and Minox, that anything less than Minox quality is disturbing. I have maintained for years that producing quality work with a Minox is excellent practice for larger formats, so perhaps I being too critical of the 6x9cm negative quality. Just how much similarity can I expect between a Minox negative and an 8x11mm section from the center of a 57x83mm negative?

My guess is that Minox quality is not approachable for a couple of reasons. Haven't I heard that it is much harder to make a BIG quality lens than a small one? Also, isn't the film registration much less accurate because of the large expanse of unsupported film?

Don

Source: AOL

Re: Minox 35 EL (1998-09-21T19:21:01)

Peter Zimmerman wrote:

> Don't buy a Minox 35 that doesn't start with GT; they had shutter and other
> problems before then. I know the GT-E is ok. My father in law had an EL
> and it died on him enough times that he chucked it.

I have a PL in a drawer somewhere for the same reason. It made some wonderful Kodachromes when it worked.

Don

Source: AOL

Re: Photo Magic (1998-09-23T15:13:43)

Funny you should start this thread today. I just finished an 11x14 and a 16x20 print from 6x9cm, Ilford FP4 negatives that were developed with PMK Pyro. They are the two best prints I have EVER made. I am overwhelmed by the tonality and "relaxed" sharpness. This is with the "lesser" Graflax lens which has to be stopped down to f/22 to be civil. Yes, the magic of "opto-chemical" photography is a unique artform. I need to do both, some negatives require it, but I feel more satisfaction from a really good silver print.

Don

Source: AOL

Re: MPL processing (1998-10-16T10:58:15)

> >Has anyone on the list ever sent film to MPL for processing that they have loaded themselves?

I process my B&W (silver) at home, but send various chromogenic emulsions (color and B&W) to MPL with flawless results. As Pete stated, be sure to identify the film and BE SURE that is what is in the cassette!

Don

Source: AOL

Ilford XP2 Super (1998-10-19T14:00:08)

Godfrey DiGiorgi wrote:

> I like Ilford XP2 rated at 200-250 ASA ...

Ilford has introduced XP2 Super which leapfrogs Kodaks T400CN with a much steeper curve (more contrast). Writeup in Oct. Shutterbug. If you like the "old" emulsion as much as I do, better hope Ilford keeps it in the inventory (hah!), or get a bigger freezer.

Don

Source: AOL

Re: Minox at photoplus (1998-10-30T18:23:47)

mathison@IX.NETCOM.COM wrote:

> Saw the results of several Epson color printers. The results are amazing
> - but not up to what you can do with a darkroom.

Joel -

They must have done something wrong!

...or the new Epson color printers are not as good as my original Epson Stylus Color Printer

...or they were using the wrong paper or driver

...or were you using a loupe?

Nobody in my group can tell without REALLY looking closely, I mean "nose to nose", and I can do things in Photoshop I can't in the darkroom, so generally the Epson prints look better. At least for a while.

Don

Source: AOL

Re: Ilford Xp2 BW Developing (1998-11-10T17:03:36)

Leo Christoffer wrote:

> I would love to hear from anyone who has found success using regular darkroom chemicals with the C-41 Ilford XP2 XP! Films.

Me too! Having NO experience with the development of color films, I was recently surprised when I discovered that I had developed with Rodinal, using my usual Tech Pan dilution and process, a roll of Fuji Reala. Dense, but visible images.

Don

Source: AOL

Re: Nikon scanners (1998-11-11T20:00:38)

Another thought on film imperfections. I view my negatives with a Minox Transparency Viewing Magnifier and Cutter, which, unlike the Minox Viewing Magnifier has a jaw that opens and closes. If I am careful and just apply slight pressure, the film will not be marked (or cut). I find it easier to use than a standard loupe and I can aim the viewer directly at a 100 watt light bulb. At the exact point where the film is illuminated to the maximum by

the bare bulb, ALL of the imperfections are visible, as well as the "etched" edges of the image. The infamous "Minox Scratch" takes on monumental proportions. Imperfections that will NOT print with a diffused light source, or even appear in a scan made with an Nikon LS-1000, will be clearly visible. It should be possible to make negatives which show no imperfections.

Don

Source: AOL

Re: Minox Nikor Stainless Steel 9.8mm Reels (1998-11-16T10:53:30)

I have added a description of the Honeywell Nikor reel at -

<http://www.slonet.org/~dkrehbie/2photo/film/nikorreel/nikorss.html>

The developing directions, taken from the instruction sheet, are quite "dated", but interesting. I must make a photograph of the reel since flat scans do not show the construction clearly. I do not use mine, preferring the ease of loading of my "drum", but it does work well and has the advantage, if you have several, of permitting the development of multiple negative strips.

Don

Source: AOL

Science & Mechanics Supersensitive Photo Meter - Darkroom (1998-11-20T17:33:52)

This is directly submini related since ANYthing that can help improve my prints from submini negatives is important to ME. I have ABSOLUTELY no understanding of electronics. I just acquired a Science & Mechanics Supersensitive Photo Meter - Darkroom, model A-3. Upon removing the top, I discovered four Mallory RM 630 mercury button cells, wired in parallel, in gorgeous GREEN fuzzy holders. I would have never thought of decorating the interior in such beautiful colors. The batteries appear to have been held in individual holders with copper pressure plates (aha, the green?) holding them in place. I bundled the lot to my local electronics store with the anticipation of finding a magic solution which would cost a bundle, and to my surprise was the recipient of the suggestion of "Why not just substitute an

single AAA cell."

So, my question is: Aside from the fact that the mercury cells were 1.4V and the alkalines are 1.5 (?), why were four mercury cells used in parallel in the original design, rather than a single AAA or AA cell? The unit already has holders for "D" batteries for the light.

The unit was manufactured by Science & Mechanics Instruments Division, Davis Publications Inc. Any clues as to who that is now?

I really don't know if the probes are still active, but I MUST try this!

Don

Source: AOL

Kodachrome processing (1998-11-21T21:33:52)

Does anyone know the addresses of the Kodachrome processing labs that honor PK36 mailers - and a preference if there is one.

Thanks to all who illuminated the darkness about mercury cells. I know it takes valuable time and I DO appreciate it.

Don

Source: AOL

Re: PMK in Minox Tank (1998-11-24T22:30:50)

Kip -

I guess you get to be the research scientist for this one. I use PMK for Minox loads of Tech Pan, Agfa copex Rapid, and Fuji Super HR, but in a 250cc tank. I have not used a Minox tank for years, but would guess that a "snappy" plunge of the thermometer (or a substitute rod of some kind) would serve to shake up the laminar layer of Gordon Hutchings' concern. Although Hutchings describes PMK as a dilute developer, I would try the same procedure as with your 35mm and 120 film. What's to loose, one roll of film, and you might discover that it works fine - then you can tell us. Although I personally feel that developer volume is a significant factor in the appearance of negatives, the Minox tank does hold 1/5 the volume of a 250cc tank and the

Minox film strip contains about 1/10 the area of a 35mm strip, so perhaps there will be enough developer. TRY IT!

For me, PMK is the perfect Minox developer, retaining edge sharpness while eliminating grain. Negatives developed in Rodinal can have more accutance, but largely as the result of the "grain effect".

Have you tried Gordon's recommended FP4? Pure green negatives!

Don

Source: AOL

Re: Accurate Meters (was: Zinc-Air Batteries revisited) (1998-12-11T18:06:45)

MOST meters are off! Intentionally. The Pentax Digital Spot Meter has a "k" factor of, as I recall, about 1.4, which, I understand, has been traditional to provide a slight bit more exposure in the B&W days. My Pentax meter manual stipulates EV 10 as 13.3 candles per square foot, when everybody knows the definition is EV 10 = 10 candles per square foot, right?

I have an SEI Exposure Photometer with which you match a half degree dot with the spot being metered. It is a precision instrument. It is "calibrated" before each use by adjusting the intensity of the internal light, assuring the light intensity of the reference dot is accurate. I used to check my Pentax, Nikon, and Minox cameras, until I got tired and realized that they were all CLOSE enough for government work. I do film speed tests with the Pentax and in all critical situations use it. I did check it when I changed from a mercury to a lithium battery. Even metering a Kodak Gray Card in direct sunlight can give you readings over a one stop range - the thing shines!

As long as YOU standardize YOUR procedures with YOUR meter, it doesn't matter whether it is accurate or not. This is one reason why ideal film speeds often appear to vary from one photographer to another.

Don

Source: AOL

Efke film (1998-12-26T22:24:25)

JOHN COZ wrote:

- > call Photographers Supply in San Francisco, CA. They have plenty of fresh 100 speed B+W
- > Efke brand film in stock.

funny you should mention that film. I have fond memories of Adox KB14 and often wished I could get some more. A friend in Berlin just sent me 40 feet of KB25. I loaded it and have concluded that it has much the same "feel" as the KB14, and indeed has a "Zone I" film speed of about ASA 14. When I looked at the first negative with a grain magnifier under the enlarger set for an 11x14 print, I was appalled with the coarseness of the grain. I immediately fetched one of my favorite KB14 negatives from the '70s and behold, almost identical grain size AND structure. So I guess I now have KB14 again. It provides a "look" unlike any other film I have used. Today I got the new Freestyle catalogue and there on page 22 it again, after 20 some odd years, appears. They shoe it in 35mm loads of both 24 and 36 exposure, 100 foot rolls, 120 size, AND 127 size. It is listed on both ASA 25 and 100 for 35mm

Freestyle has a web site at - <http://www.freestylesalesco.com>

Don

Source: AOL

Re: Minox Products (1999-01-16T14:03:28)

I think it is a bit unfair to condemn the ingenious Minox chain because it suffers from abuse. Mine is in the region of 40 years old and I still use it with excellent results with Tech Pan and Super HR film. I had never thought of measuring it since I hadn't realized it would stretch (ignorance IS bliss!) but I can see that it is indeed possible to deform it. I personally would rather have it flexible and somewhat fragile than stiff and durable, and for me, it does beat carrying a separate measuring device all the time. Considering the era of its design and manufacture, I think it is a remarkable device and has made life a good deal more pleasant for me.

I can't imagine subjecting ANY fine instrument to the kind of abuse that would stretch the chain very much, but it certainly is a consideration that should be added to the list of things to look for when buying a "pre-owned" Minox.

Now that I have been so eloquently informed of its shortcomings, I will have to measure the bead locations and remember to lean a tad forward each time.

Don

Source: AOL

Re: T/MAX 400/MICRODOL (1999-01-17T08:50:28)

I agree with Godfrey's analysis. When T-Max was introduced I slit some and compared it with Tech Pan in my Minox III's. Since I was using Rodinal 1:100 with sodium sulfite for the Tech Pan, I tried it with the T-Max 100 - BUT, as I recall at the "normal" dilution recommended by Agfa (probably 1:50). For Minox work I did use the sodium sulfite to partially counter the grain effect of the Rodinal. My recollection is that I was amazed that a 100 speed film worked so well in Minox size. As Fred Picker used to say when asked if something would work - "Try it!" I would certainly start with the manufacturers recommendation, which may well currently be XTOL?

As to the virtue of Kodak products, there are many fine photographers using them with spectacular success. T-Max is a fine film as is Tech Pan. I have a friend who loves AgfaPan 25 in 120 size and I am having great success with Ilford FP4 with PMK Pyro. EVERY film (and developer combination) has a personality which, when matched with the situation and technique, produces the optimum negative. I have spent considerable time finding the correct combination (FOR ME!) for Tech Pan with Rodinal, and FP4 with PMK, and Tech Pan with PMK, and KB14 with Rodinal and PMK. The combinations are endless.

My experience with Microdol has produced negatives with a lot less "zip" than I like, which when combined with the softer edges, provides me with lifeless negatives. But obviously people still use it and like it or it would be gone by now.

In the late '70s when Tech Pan was introduced, someone suggested, probably in Peterson's Photographic, dilute Rodinal (1:100) mixed with a solution made from 56g of anhydrous Sodium Sulfite in 1L of water. I tried it - it worked for me - why change? But that was to tame the high contrast of Tech Pan, so for other films, with which I use Rodinal, I follow Agfa's recommendation (a tad less time) but use the sodium sulfite solution. Works well for most films. But I suspect XTOL, or HC-110, D-76, or any of the Ilford developers would also work well. You might try to find out what Alan Ross uses, as he is

a master of T-Max.

Don

Source: AOL

Be thankful MPL is there! (1999-02-17T12:41:24)

I can't believe what I'm reading!

I have never met Don Thayer in person, but am proud to call him friend. I AM biased. He is one of the most considerate and honorable people I have encountered in my lifetime. He is desperately trying to maintain a Minox presence in the United States and is, I think, doing it with integrity. He sells Minox products at list price for philosophical reasons, not for extra profit, and maintains a loyalty to the "factory" that most would have abandoned long ago. He DOES understand the photo finishing business and continues to provide outstanding service for a very small segment of the photographic community, which without him would be totally abandoned.

I have a local 1-hour lab owned by a fellow who has a Minox EC, so I slit him film and he develops my C-41 - UNTIL I want color prints, then thankfully Don Thayer and MPL are available. We have discussed the problems of "commercial" printing from 8x11mm negatives and it is not a trivial exercise. He does work for people whose names you would recognize, thinks MPL printing is superior, and is reluctant to spend a lot of time trying to duplicate it locally.

If you want to pay "drugstore" prices, I strongly suggest using 35mm equipment. If you want to enjoy the Minox 8x11 format, either learn to do your own processing or send it to MPL and be thankful that you have the option.

Don

Source: AOL

Re: Sodium Sulfite Vs. Acutance (1999-03-10T08:38:14)

Ray,

I'll take a shot at this, even though I am not a chemist. I suspect that the

edge effect that I get, primarily with Rodinal/sodium sulfite and Tech Pan, is due to the long intervals between agitation rather than the presence or absence of the sulfite. Generally I have thought that the Macci (sp?) lines and general edge sharpness were the result of developer exhaustion along boundaries of light and dark, rather than the developer ingredients. I would suspect that the sodium sulfite does indeed reduce the perception of sharpness which can be attributed to grain - as we all know Tri-X prints can appear sharper than Pan-X prints for that very reason - but I don't think by much.

I have used sodium sulfite with Rodinal largely because it fills in the toe of the curve, giving me better low value separation.

Don

Source: AOL

Re: APS vs MINOX (1999-03-10T10:00:28)

An Example.

This morning I went to get the car washed and noticed a strange machine on the RxR tracks near the station. I walked up to the tracks to visit this strange double-ended self-propelled Union Pacific "device". Had a chat with one of the crew. It is a Track Evaluator. Looks like a double ended tour bus, about the size of an engine (which it really is). It is filled with computers and reads the track with lasers, assessing the gauge, condition, etc., AT TRACK SPEED! There is only one in the country and it had just arrived last night from Los Angeles and was heading to San Francisco and then Chicago. Thanks to the ECX, I now have several images of this unusual device. Were I a RxR buff, this might have been the chance of a lifetime. How often do you carry any other camera when going to get the car washed? Thanks Herr Zapp!

Don

Source: AOL

Re: minox ec Q's (1999-03-15T08:13:46) N

ot on the subject of subminiature photography, but perhaps leading thereto, my 5 year old granddaughter had (has) a blast with a "Holga 120S" from

Freestyle (<http://www.freestylesalesco.com>) and some "printing out" paper they carry. The camera is 120 so she could easily see the images on the film, and simply contact printing them with normal light and developing with water, took her through all the "gee whiz" part without the hassle. She learned how to use the camera in about 2 frames, and stopping the film advance at the numbers was the only skill that required much attention. Her composition even improved during the first roll and the "catch the critical moment" turned out to be really fun with the elephant seals on the beach. With kids, the shorter the time frame the better - Polaroid is even better, but MUCH more expensive. I use my Minox, she uses her Holga. I get 120 Ilford FP4 from Hunt's (see ad in Shutterbug) for about \$1.89 a roll.

Don

Source: AOL

Re: MPL color developing? (1999-03-15T23:46:01)

Godfrey DiGiorgi wrote:

> Minocolor PRO is Fuji Reala Fine APS film, ASA 100, and is absolutely
> excellent. You could probably buy some 35mm Fuji Reala and get just about
> the same thing,

You have to be VERY careful about Fuji NEW Reala. According to Fuji's bar code, all of the "Reala" in our area is gray market, as is the Reala I was assured was "US" that I got from B&H. Fortunately the "Reala" name is no longer in use and is replaced by, I think, "Superbia"? It wouldn't really matter, except that the "NEW" Reala and the Minocolor PRO from Minox has a grain size 1/3 the size of the old Reala. The ONLY way I know of to get the 'real stuff' is to get the Minox film, or be sure you get the right stuff from Fuji USA.

Don

Source: AOL

Re: MPL color developing? (1999-03-17T07:53:45)

for what it is worth -

During my conversations with Fuji, the following was their reply to my query

regarding gray market film.

> All Fuji products made for the USA have UPC codes that begin with 74101.

Don

Source: AOL

Re: MINOX EC: what a BUST??? (1999-03-18T07:42:33)

Mark -

The easiest way to see if it is in the ballpark is to expose a 35mm frame with your best 35mm lens, at f/3/5, with the same film, and compare the middle 1/3 of the 35mm frame with a similar Minox frame. The Minox frame should be better - perhaps only slightly, depending on the film, but certainly no worse.

Don

Source: AOL

Re: Black cameras, was Curious Minox item (1999-03-18T11:49:54)

Am I missing something? I have had a black LX for years. Probably a couple of hundred rolls of film which translated to a lot of times in and out of the case. Looks great. Not the original luster finish, but a nice patina. Still all black except where I dinged it on the concrete RxR station platform. I would guess it will last longer than I do. Of course I don't put it out in the sun for hours, but I see no fading. How can it be any better?

Don

Source: AOL

Re: crud on negs (1999-03-20T11:21:55) Mark -

Are you filtering your solutions? A coffee filter works wonders. Also, is the wash water reasonably clean? If you have really dirty water, you might have to filter a gallon of ordinary water and use the soak and water exchange method of washing. I mix Photo Flo with distilled or "purified" (de-ionized) water and soak for a minute at the end of the process - then clip the film and pour the solution down the strip, half on one side then the other half on the

other side. No rubbing, no squeegee, just hang up to dry. NEVER have crud!

Any crud you might get from the slit should come off when you load the cassette. When winding the film on the dowel for loading into the cassette, you DO draw the film through some kind of dust magnet cloth or film cleaner brush (antistatic) don't you?

Don

Source: AOL

Re: Is my logic correct? (1999-04-12T21:33:50)

Just a note to apologize to any and all who have tried to communicate with my "cut wire" over the past month.

The problem was mostly caused by jumping from v7.5 to v8.5 and being unfamiliar with the new "Remote Access" panel in place of PPP, and then installing Netscape 4.5 which has everything moved around and renamed. I keep all of my internet stuff in a separate folder that is part of my backup folder. Netscape has little hidden places where you can reassign the location of the address book, cache, bookmarks, etc. As I age, it takes me longer to find the hiding places.

The new "Yosemite" Macs are devoid of the old SCSI and serial ports, so one must make adaptations if one chooses to retain the old hardware, scanners, CD burners, printers, etc. I installed a SCSI board and discovered that the external disc drive, the CD burner,, and the Nikon slide scanner worked flawlessly the first time. The only hitches were with HP and Epson software.

I am now trying to keep up with my new "Blue G3" Mac that is so fast I can no longer scroll the way I used to. The problems that were so irritating turn out NOT to be Mac caused, but with 3rd party software. Everything that worked on the original Mac from the '80s, works on the G3 but FASTER!!!! MacDraw (long abandoned by Claris) is so fast that clicking the mouse on the zoom icon causes several enlargement steps, forcing me to learn how to lightly and quickly barely tap the mouse to get a single enlargement or decrease in size. Photoshop FLIES!

Anyway, I think I am back up and running. The show appeared to be a

great success and I am now going to concentrate on spring shooting, and trying to find unanswered mail.

Don

Source: AOL

Efke KB25 (1999-04-14T07:04:57)

I missed the start of the Efke discussion, but can attest to the quality of the film. I have recently been using it in 35mm and 120. With a grain magnifier under the enlarger it looks TERRIBLE. The prints can be GORGEOUS! Many of my favorite images were made with ADOX KB14 in the '60s and '70s and I was suspicious that it might be the same emulsion. A friend in Berlin sent me some and I made some exposures. The grain looked terrible so I retrieved a favorite negative from the '70s. It was identical. The speed tests confirmed an ASA (with my system) of about 14. The color of the developed film looked similar. The "personality" of the images is quite similar. I am now using it as an important component of my system for images for which it is best suited. Since I can't remember what I developed it with in the dark past, I have been using PMK Pyro, with results I find extremely satisfying. It has a unique "look" and personality which may or may not suit your vision. For me, it is the perfect film for our California missions. It is available from Freestyle.

I would start development experiments in the vicinity of times for AgfaPan 25.

There are so many better films for extremely small negatives (Minox) that I would not so use it myself.

The 120 emulsion appears to differ from the 35mm emulsion and I don't like it as much. For me, the 120 film is too thin and when dried takes on the shape of a long tube. The curl is horrendous. At that negative size I prefer Ilford FP4, XP2 Super, and Tech Pan.

Don

Source: AOL

Re: HELPFUL suggestion for first timer, please. (1999-04-16T11:46:43)

Tony -

Why complicate your life.

1. Decide whether you need ASA 25 or ASA 100.
2. Buy factory loads from MPL.
3. Since you are getting Agfa film, why not use Rodinal and follow the directions on the box.

I did, and have 2 Yosemite images exhibited in a recent show. It really doesn't need to get any better than that. Before you select ASA 25 or ASA 100, consider the light you will most likely encounter. ASA 25 can be exposed at 1/500 or 1/250 on "f/16 Rule" conditions with an f/3.5 Minox.

KIS and enjoy!

Don

Source: AOL

Re: 'nuther EC Q (1999-04-17T06:23:27) Mark -

How dark were your "inside" exposures. I believe the EC and ECX have a much shorter MAXIMUM exposure than either the C or LX and you may just be exceeding that maximum. Someone else may have read the manual (I never do) and have specific data on this, but have encountered the problem in dark missions with slow film..

Don

Source: AOL

Re: Nikon film scanners and Minox film (1999-04-20T16:36:55)

Godfrey DiGiorgi wrote:

- > The thing to do is to make a Minox mask that will fit in the 35mm
- > filmholder. I don't know the Nikon setup specifically but I'm sure it's
- > possible to do something along these lines.

Exactly! I used the film splitter to remove a Minox width strip from a developed and fixed (black) piece of 35mm film. I merely stick it in the 35mm holder with Scotch poster tape (double sided and easily removable). The Minox strip then fits perfectly in the slot.

Don

Source: AOL

Re: Fuji HS-U results (1999-05-16T22:12:36)

XKAES@AOL.COM wrote:

> Has anyone else had any experience with this film?

Yes, Joe. I have used it in the Minox, slitting from 16mm obtained from <http://www.filmdex.com>

I found the Zone I film speed to be about half that of Tech Pan, but about equal at Zone V. I developed in both Rodinal and PMK Pyro. It is a nice film, perhaps a little more grain than Tech Pan, but a more "normal" spectral response. I did not find the shoulder more forgiving than Tech Pan. My results are discussed at

<http://www.slonet.org/~dkrehbie/2photo/film/choice/pers.htm>

> What are other people's thoughts? Is 30 seconds SAFE?

Ever since Ilford published the "short" fixing technique, I have used it with success for both film and paper. Using a non-hardening fixer for 30 seconds to a minute, followed by the recommended PermaWash treatment and wash, has produced

consistent successful results with Kodak Residual Silver Test Solution ST-1 and/or the selenium test. In appreciation to Ilford for developing and publicizing the technique, I generally use their materials and process. Kodak Rapid Fixer WITHOUT THE HARDENER also works fine

Don

Source: AOL

Digital Negatives for Contact Printing (1999-05-22T09:31:55)

As I am sure you are all aware, I have an 8 inch limit on the size print I make from Minox negatives. Silver prints that is. I have made stunning 10 x 14 prints with my old Epson Stylus Color printer, but that is more about

"Gaussian Blur" and "Unsharp Mask". The interesting factor in digital printing is that, whereas enlarging a "silver" negative increases the SIZE

of the grains, enlarging a digital negative increases NUMBER of "grains"

-

NOT the size. With silver negatives, the question is how big can one enlarge the image - with digital negatives, it is just the opposite.

IF one can get enough samples (pixels) from a Minox image to provide between 250 and 300 per inch on the final contact printing negative, AND if

enough information is available to satisfy the need for detail and accuracy, Photoshop can help with the rest.

Imagine making an 8x10 platinum print from a Minox negative! I suspect we

have all thought of making a negative with transparency material and an Epson printer. Discovering the difficulty of getting Epson ink to stick to

the transparency materials of yore. put an end to my early experiments.

Two things have recently happened which make a return to the adventure potentially rewarding for those who make their own prints.

1. Epson technology has greatly improved with finer dot patterns, improved

inks, and media.

2. Dan Burkholder has just released the second edition of "Making Digital

Negatives for Contact Printing".

In my opinion, this is the most significant book on personal printmaking

since the AA series. I have spent considerable time experimenting with this concept, wasted a lot of material and time, and suffered

considerable

frustration. Dan Burkholder provides a springboard with which one may vault over the empty pool.

The making of digital negatives has been hindered by difficulty of getting

a truly random dot pattern, of a fineness approaching Tri-X film. Just as

our "depth of field" rules play on the poor resolving power of the human

eye, so it is that grain patterns rendered small enough disappear. Even

Tri-X looks marvelous when contact printed. It appears that we are VERY

close to being able to make "Tri-X" negatives on the new breed of Epson printers. The tough part is getting a truly expressive print. It is not

as simple as building the perfect image on the computer monitor and "inverting" it.

My friend Steve Lunsford introduced the bunch of us to Mr. Burkholder's work and an early book which has been out of print. The Second Edition is

now available. I just received mine and in less than a half-hour Mr. Burkholder solved two nagging problems.

It should be available from your local bookstore. I got mine from SJL Images Bookstore

<http://www.sjlimages.com/sjl.studio/transfer.house/gift.store/digital2.html>

- which routes the order through Amazon.com and receives a small "finders

fee". (small reward for finding Mr. Burkholder)

You might also browse through the titles at the SJL Bookstore for other related titles. This is an excellent resource for books dealing with all

facets of photography.

This is truly a "Subminiature" topic, in that we may now be able to fully extract the

potential of the Minox camera. I have no idea what is possible with Super HR, PMK Pyro, digital negatives, and platinum. I think the full potential of "Minox, Metol, and Macintosh" may be just around the corner.

Don

Source: AOL

Re: Digital Negatives for Contact Printing (1999-05-23T07:13:51)

Hurray! Great idea Patrice

In the early days of video cameras there was a rush to convert old home movies to video. I sent a roll of 8mm Kodachrome to the "best" lab I could find (in and around Hollywood you would think you could find a good "film/video" lab). and was UNDER-whelmed with the results. Having taken the movies with a Bolex camera and having a Bolex projector, I decided to try the "projection" method. Creating a white "screen" with museum board on a larger black mount, I projected the 8mm movies and recorded them with a Pentax 8mm videocam. The results were better than the pro version once I adjusted the ambient light in the room to control contrast buildup. You are absolutely correct in your discovery that working with an enlargement is the best approach for Minoxery.

I hadn't thought of your discovery and for 640 x 480 images it is ingenious. GREAT idea for proofing! Thank you for sharing it!

Don

Source: AOL

Minox film in South Africa (1999-06-10T14:27:53)

I have had a request for information as to the availability of film and processing of Minox 8x11mm film in South Africa. I recall we have a contributor in that area. Any help will be appreciated.

Don

Source: AOL

Re: Further to "Don K.'S Minox Reel".... (1999-06-11T21:10:07)

Funny you should mention this, James. After 30 some odd years of use and a few pieces of plastic chipped off, I decided to make a new one the other day. I had saved several pill bottles for just such an occasion. I had a roll of copper wire, so cut a 9.5mm strip of heavy paper to act as a guide and wrapped the wire in a spiral around the pill bottle, using small holes at each end to secure the wire. Then drilled a bunch of holes in the bottle to permit solution to flow, cut it to the proper height, and viola, a new drum. To secure the whole thing, I dunked it in some epoxy like stuff I have. Then cut slits at various places to hold the ends of the film. Total capital outlay, \$0.00. Total time, less than an hour. This one will outlive me - actually the other one would have also, but it was beginning to look like I feel.

Don

Source: AOL

Re: Further to "Don K.'S Minox Reel".... (1999-06-12T07:10:45)

Mark Hahn wrote:

- > slide a strip of plastic
- > cut from a water bottle into the outer tracks of a 120 ss reel and just
- > tape and wind the film around the plastic.

What a GREAT idea.

Source: AOL

Digital Negatives for Contact Printing (1999-06-13T21:37:24)

I have made 3 portfolio prints today. I used 6 sheets of paper. 3 sheets of Epson Photo Quality Glossy Film, and 3 sheets of Ilford Multigrade IV FB. No test strips. No dodging. No burning. Same light. Same exposure. Same development.

What happened today was the result of several weeks of experimentation and "calibration". I now know what curve should be applied to the image, what color my negatives should be, and what exposure to be applied to MY images which are to be printed on Multigrade FB. I have a separate curve for MG IV and the old MG.

I must admit that each print today was from a file that had been

previously "managed" in Photoshop for digital printing. I don't want to minimize the effort needed to produce an expressive image. But once the image is satisfactory, the printing effort is GREATLY reduced.

All of this means that I can now select a paper for its expressive quality and no longer need variable contrast paper. I can test a print with a half sheet and know that a full sheet print will be exactly the same. I can now make several identical prints without forgetting steps or losing count during a manipulation (a more serious problem these days).

I was interested in avoiding "service bureaus" because of the cost, difficulty in communication, and turn-around time. I also feel that I must control the entire process.

The "grain" produced by my Epson 740 is almost identical to that from a 24x Tech Pan optical enlargement. The image can appear sharper than a pure optical enlargement, and the ability to adjust overall and local tonality with Photoshop makes this a easy choice.

Again I will recommend Dan Burkholder's book, which is also an excellent tutorial for Photoshop techniques.

I have some discussion and illustrations at -
<http://www.slonet.org/~dkrehbie/2photo/digital/outneg/outneg.htm>

Don

Source: AOL

Re: B+W Viewing filter question... (1999-07-25T13:45:23)

It is Wratten #90. I have one mounted in a Gepe Mount. Fred Picker at Zone VI sold them and that is the one Calumet sells. For B&W, I find it VERY useful for identifying tonal mergers which are masked by different colors. In fact, I have a small clip with a piece of Wratten #90 that I snap over the viewfinder of a camera, including the Minox. Many apparently good images are ruined by a lack of tonal separation, and the Wratten #90 can give you a clue in time to attach a filter to overcome the problem. Mounted in a Gepe or, as the Calumet unit, mounted in a larger "mask", it provides an excellent preview and composing device. Mine has a lanyard and hang around my neck. AA

introduced the idea and Fred Picker promoted it. Wratten #90 filters were always available in the AA gallery in Yosemite, until AA died - now the guy working the counter didn't know what they were. Ah, well.

If you are a B&W photographer, and haven't viewed the world through a Wratten 90, you should!

Don

Source: AOL

Re: Digital Storage (1999-08-14T12:33:02)

Larry -

CDs are cheap. Store the original scan, and if you are scanning in color mode, decide which channels you are going to keep and save them. I can end up with a BUNCH of layers built on top of the original image, all of which gets archived to CD - sometimes with intermediate "saves". A 600spi color scan of a 6x8 inch Minox B&W print, will be in the 50MB range and with channels and layers can sneak up on 150 plus MB. It is also not uncommon to have a final 100MB flattened file for the contact printing negative. If you plan to further modify the image, DO NOT use a "lossy" compression scheme like JPEG. I always leave the stored images in "Photoshop" format

Yes, CDs are GREAT! For a buck and a half, you can save a lot of time. The reason for ME to save EVERYTHING, is that I keep learning and find I can go back and make improvements with new skills. With layers, individual operations can be altered, fixing the bad stuff and leaving the good stuff.

Don

Source: AOL

Re: HS-U results (1999-08-22T17:04:45)

I have a few comments about Fuji HS-U and results of comparisons made a while back at -

<http://www.slonet.org/~dkrehbie/2photo/film/choice/pers.htm>

It is a nice film, similar in speed to Tech Pan, without the spectral response distortion. My feeling was that it had a bit more noticeable grain. Would be interesting to check it with PMK, as the Super HR is so nice developed therewith.

Don

Source: AOL

Re: HS-U results (1999-08-22T17:09:00)

James Hewitt wrote:

> Yes, Where is Fuji HS-U available from?

Try

<http://www.filmindex.com>

Don

Source: AOL

Re: Types of Rolleis (1999-09-18T07:14:08)

Mark -

> any recommendations for using APX 25 with Rodinal + sodium
> sulfite (proportions, times etc.)?

The Rodinal instruction sheet has a Time/Temperature chart for various combinations of Agfa films. I chose the AgfaPan 25 "RODINAL 1+50 (small tank)" chart and made a chart for times half way between gamma 0.55 and 0.65. I do add the sodium sulfite as with Tech Pan and agitate PRECISELY as recommended in the instructions. On MY chart, the Time/Temperature curve crosses the 20 deg C line at a tad less than 7 min 50 sec. YOU have to decide what kind of a CI you want, so some experimentation is in order. My results with the above please ME. Good luck!

Did I mention that with old Rolleis (and any other old camera), separation of the lens elements is a possibility. They can usually be re-glued, but not for free. Be sure to run a couple of rolls through before final acceptance of any

old camera. By Rollei was inherited from a dear friend who bought it new and cared for it like a jewel - it still had the problem.

Don

Source: AOL

Re: cut film width, and Minolta enlarger (1999-09-22T12:02:53) Dan wrote:

**> So my question is: how can it be that my new film, which is visibly
> narrower than a developed piece of Agfa (from MPL), is too wide?**

Dan -

More than likely the film you loaded is not wound straight when you insert it into the supply side of the cassette. After you insert it into the supply side, turn the cassette upside down and press firmly to push the film completely into the supply chamber. The only check on film width is whether, when inserted into the supply chamber, it is not visible above the edge. I have never found the width of AgfaPan to change during processing, so your film is probably just not wound straight before inserting into the chamber.

Don

Source: AOL

Ilford MG FB Warmtone? (1999-09-29T14:12:15)

I know some of you are using Warmtone with success. I just tried it and with my usual Zone VI developer, it looks green(ish). Selenium helps somewhat, but I am wondering if there is a "preferred" developer. I know, why not try Ilford, after all they make the paper. I'm really getting too old for this experimentation stuff, so a perfect solution right out of the bag would be nice. I would really like a kind of "musty" color, somewhere between black and warmish.

With my contact negatives it appears to be MUCH slower and lower contrast than MGIVFB. True?

Thanks all,

Don

Source: AOL

Re: FW: loading point for a 42 frames film (1999-10-18T06:58:53)

Michael -

I typically use Minox loads which are in the range of 42 frames and start at the "red dot", or normal starting point for a 36 exposure roll. The frame counting mechanism compensates for the amount of film on the takeup roll, (the diameter of the effective cylinder at any moment) so the thickness of the film can also make a difference. The only reason for a separate loading point for short lengths is that the "factory loads" of 15 exposure film have a thick walled takeup spools to simulate 15 exposures of film already wound.
<http://www.slonet.org/~dkrehbie/2photo/slitter/film.htm>

Don

Source: AOL

Re: Digital Darkroom Musings (1999-10-19T22:34:08)

This afternoon, our "Visions '99" was juried. Best of show was a contact print from a digital negative made with an imagesetter. In past years, since '95 I believe, we have had at least one award winning print from a negative made with an film recorder. This is the first for a digitally made negative.

Yesterday, the best printer I know came by to show me a contact print from a negative made from a digital negative printed with an imagesetter. Examination with a high powered loupe revealed a "grain structure" that I would call better than well processed Tri-X. I have not seen a better print, period, and have no idea how one would distinguish it from one made from a silver negative. Another of our group is making colored contact prints with color separation negatives made from digital images. Negatives made with a proper imagesetter are not cheap, but produce spectacular results.

Negatives printed with an Epson Photo 1200, must be inspected with at least an 8x loupe, in the mid tone areas, to identify them as "fake". High and low value areas are "grainless", resembling prints made from Tech Pan or Fuji Super HR negatives. In some uniform middle values, there CAN BE a slight "corduroy" effect which is only detectable with an 8x loupe. It is a superb printer - but uses a LOT of ink! Epson has taken a page out of the Polaroid book - give the printer away and SELL the ink (and paper).

There is no question that silver, or "alternative media" contact prints can be made that are indistinguishable from those made with traditional negatives (and better if you include the ability to tailor the negative).

The main commercial thrust is, of course, for "archival" inks, including the substitution of "monochromatic" inks for the CMY inks in the color cartridge for "quadtone" grayscale images.

The issue is still pixels, pixels, pixels, but we are now seeing 4k scanners which will ultimately replace 2700 spi for negatives, and when we get reasonably priced 4.000 samples per inch for 120 film, I'll quit scanning prints (except for the Minox).

It is indeed an exciting time!

Don

Source: AOL

Re: [Re: [Re: Dialogue vs Advertising]] (1999-11-11T17:22:50)

ANDERS NYGAARD wrote:

> just out of curiosity, how long does it actually take to install new
> equipment?

Not long If it is the same old technology. I hate to hear, again and again, uninformed comments on the operation of someone else's business. Don Thayer is

passionate about the Minox and has demonstrated that passion with actions for years. He has suffered through periods when Minox had no chance to survive, to those whose outlook was worse. Throughout, he has been optimistic and willing to invest in the promised future. Both Pete and I have tried to keep y'all posted when we felt it appropriate. In truth neither of us know exactly where the process is at any given moment, largely because Don Thayer doesn't either. If any of you lived through the first 20 years of computing you have a feel for the problem of trying to be at the cutting edge - NOTHING is ever delivered on time OR working. As soon as I had examples and permission to do so, I reported and gave you a reference to the new digital processing of 35mm and APS. NOTHING has been said about the digital processing of Minox 8x11mm material because it is not at present available - Mr. Thayer hasn't volunteered and I'm not asking. If it happens, you'll be the first to know. He is not the type to talk about vaporware.

The issue of keeping a website is another one. I attempted to help some time back. The MPL website is maintained by Don Thayer himself using Microsoft software. The site is serviced by a company that requires all maintenance to be made through some "Microsoft Only" software. I was appalled at the user surliness of the version I bought to help and finally had to abandon the project - I am too old and too tired, and 10 years with IBM's DOS used up all of my tolerance for frustration. I think he has done a great job of providing us with a LOT of information about the Minox, with a site that is more elaborate than many, and I am sure that WHEN the next step is taken we will all hear about it.

Why don't we just relax and hope that ALL of the sources for subminiature photography continue to exist and provide state of the art service.

Don

Source: AOL

Re: Back to the cameras (1999-11-11T17:39:02)

XKAES@AOL.COM wrote:

> I like autoexposure too, but it's off the mark too often for me.

Oh, my! I have just the opposite experience with the Minox LX, C, and EXC. Dead on! The LX and C will work anywhere, indoors and out, whereas the ECX has

a bit shorter maximum time and will underexpose slow film in a dark interior. I rarely use the IIs and B, or even the LX, any more, preferring the C and ECX. I had DAG install an orange filter in the C and use it for B&W, while the ECX is the perfect color camera with Minocolor PRO.

Don

Source: AOL

Re: Back to the cameras (1999-11-11T23:09:23)

Mark Hahn wrote:

> "Dead on" for me means that you can print an entire roll of film without
> changing your enlarger exposures.

Me too! That's why I like the C - it's easy to bias the exposure when necessary.

Don

Source: AOL

Re: Back to the cameras (1999-11-12T10:20:42)

> << "Dead on" for me means that you can print an entire roll of film without
> changing your enlarger exposures. >>

Sorry guys. Yesterday was a bad day. "Dead on" was an incorrect description. Close enough to "print an entire roll of film without changing my enlarger exposures" WOULD have been a better.

Don

Source: AOL

Re: Back to the cameras (1999-11-14T22:39:17)

Since I started this thing with my "Dead On!" comment, and since we WERE talking about EXPOSURE which is only half of the old saw about "Expose for the shadows, develop for the highlights" which also is the foundation for the

Zone System, I must point out that WE are talking about roll film, while AA built the Zone System around individual film sheets. He did, on occasion, use a Contax, and did eventually migrate to a Hasselblad, and was painfully aware of the problems therewith associated. A significant breakthrough, announced around '79, was the effectiveness of selenium toning on film and the use of same on individual frames of roll film - simulating N+ development.

As for recommending the use of a Minox, you must ask, for what? I suspect that for the right circumstance, he would, he was enchanted by elegant equipment and respected excellence. I had mine in Yosemite in '79 and wasn't run out of town, in fact have several rolls of Minox exposures - I am sure everyone was aware they were being photographed with a Minox. I also have Nikon negatives, and Rollei negatives. The most inspiring artist I met during the '79 session was Roy DeCarava, who was wandering around the Valley with Nikon loaded with Tri-X - not exactly straight out of "The Negative", but I would love to see the prints.

Please don't forget why Herr Zapp invented this thing in the first place. For that, it cannot be beat! If you CAN take a larger camera, TAKE IT! If you have time for spot metering and exposure and development calculations do them! The Minox is NOT a substitute for a Deardorf!

I apologize for my "dead on" comment and would amend ot to read "good enough for me"

Don

Source: AOL

Re: Back to the cameras (1999-11-14T23:02:41)

I apologize for my "dead on" comment and would amend ot to read "good enough for me"

I can't believe I said that! It needs to be qualified to apply to situations when individual images cannot be fully treated. I do apply previsualization to every image, consciously or sub consciously, and do bias the ASA setting on occasion. I also selenium tone individual frames. That said, I still maintain the the cameras in question give me exposures that are remarkably exposed, nearly always printable to rather high standards - considering the negative

size, and in a remarkable number of cases as good as if they had been laboriously metered. Remember, even with extensive metering and calculation, a SINGLE final exposure value is chosen.

There is no question in my mind, that laboring over a proper exposure will be rewarding, IF the process also includes specific development to assure proper Zone placement. BUT then, there's Edward Weston.

Don

Source: AOL

Re: BBack to the cameras (1999-11-15T22:57:03)

XKAES@AOL.COM wrote:

> ... we don't have the luxury of changing development for each negative,

Oh, but you DO! Selenium toning negatives can expand density 2 zones, and with Tech Pan developed with Rodinal, nearly 3. This gives one the ability to vary the development of individual frames over a reasonable range. One can, for example, develop the roll at N-1 and rely on toning individual frames up to as much as N+2. I would argue that IS good Zone System practice. In fact AA recommended it as a useful tool when using roll film.

As for bracketing - the digital age makes this an interesting exercise. Since an extreme overall luminance range may cause one to reduce development to a point where neither low, middle, or high values are very interesting, two exposures can be made - one favoring the high values and another the low. They may then be combined digitally, providing an image with good local contrast, detail, and tonal separation in all three.

Don

Source: AOL

Re: BBack to the cameras (1999-11-16T19:50:51) "Peter D. Zimmerman"
wrote:

> selective toning of a single neg is hardly practical with a submini. It
> approaches practicality with 35mm,

Well, I hate to tell you how many 35mm AND Minox negative frames I have altered this way. There are rarely adjacent frames on MY Minox strips that need differential alteration, so the Minox strips are usually at least 3 frames long. 35mm frames are merely dropped into a beaker with the solution and swirled with a glass stirring rod for however long, then finished, washed, and hung to dry. I then mount them in Gepe mounts. The effect differs significantly from increased development in that the thin part of the negative is not altered at all, while each tone is intensified in direct proportion to its initial density. In addition, grain is NOT increased as would be the case with increased development. Thus, it becomes another way to minimize grain - under develop, then intensify with selenium - it works! So, in effect, the smaller the negative, the more useful the technique is.

Don

Source: AOL

Selenium toning negatives (1999-11-18T08:33:51)

As per my original notes, I use 1 part Kodak Rapid Selenium Toner and 2 parts Heico Perma Wash working solution. AA in his book "The Negative" suggests 1:2 or 1:3. depending on the film, and degree of intensification, I swirl the film in the beaker for up to 5 minutes. If the entire roll needs treatment, I use the developing tank and agitate constantly.

Since Kodak Rapid Selenium Toner is a solution of ammonium thiosulfate (same stuff as Kodak Rapid Fixer), you have essentially just re-fixed the film and must go through your wash cycle again. It is interesting that early on, the suggestion was made to mix Kodak Rapid Selenium Toner with a "washing aid" such as PermaWash - now Kodak recommends plain water - and I doubt that it makes any difference. It is simply that after a half-century, I hate to change.

I notice that AA recommends re-fixing before immersion in the selenium solution. I never do this. But, he and Fred Picker always recommended a hypo bath before toning prints, which I never do either - with modern materials and proper fixing initially, staining is infrequent. So make your own experiments.

Each film/developer combination will react differently. Tech Pan developed with Rodinal is quite active and CAN achieve n+2 to N+3 results. At the other end of the spectrum, film (including Tech Pan) developed with PMK Pyro show little to no enhancement.

This technique, coupled with "dry bleaching" the final print, can achieve an enormous amount of control when using roll film. The question is whether post-control over contrast, or the luxurious tonality of PMK is the paramount concern. In an environment where the luminance range will vary widely during the exposure of a single roll, one might opt for "standard" developers, develop for the widest luminance range on the roll (N-), and retain the option of individual frame enhancement. When the luminance range for the entire roll is within acceptable limits, I tend to opt for the PMK and control range at the print with split filtration printing on VC paper and ferricyanide.

Source: AOL

Re: Films and developers (1999-11-19T11:52:24)

Godfrey DiGiorgi wrote:

> The difference in grain, acutance and tonal quality is really quite
> dramatic!

Surprise! There's no free lunch. AgfaPan 100 is no match for AgfaPan 25 which is no match for Tech Pan, which is no match for Fuji Super HR. etc., etc. The same is true of developers. With respect to "grain, ... and tonal quality", Rodinal is no match for PMK. It is probably a bit better for the "acutance" part.

Don

Source: AOL

Re: Pill bottle Minox tank? (1999-11-25T08:00:06)

Chad -

It may have been mine since I haven't heard of anyone else using such a dumb device. It is actually a derivative of Walter Zapp's Minox tank, so the credit for wrapping the film around something like this is his. It

a cheap and quick way to get started, provides even development, and additional developer volume for dilute developers..

<http://www.slonet.org/~dkrehbie/2photo/film/develop/Minox/devtank.htm>

Don

Source: AOL

Re: Minox coffins (1999-11-29T15:07:54) I

have never had problems with Agfa Copex Rapid specifically. I HAVE had some light leaking with ANY film when swapping film in mid-roll in daylight. Because I have self-loaded film for years, I always load and unload my cameras indoors or in VERY subdued light. I would suggest keeping your cassettes in standard plastic Kodak film cans with the black caps. The gray caps may be OK, but I cannot vouch for them. I use the BLACK plastic cans from Kodak to take Minox color film strips to my processing lab. They have resided therein for days on occasion without degradation. I normally keep loaded Minox cassettes in the "coffins" within a plastic film can to provide a water tight environment.

Don

Source: AOL

Re: Pixels vs silver (1999-11-30T21:33:42)

Well, I don't know about the math, but in a 600ppi scan of a 16x20 inch silver print from a high Contrast Copy film Minox negative, it looks to me like the grain clumps (and spaces between grain clumps) in a middle gray area, are about 8 pixels across. If this is true, we're going to have to go a long way to get direct digital images that even approach the content of silver film. Illustration at the bottom of -

<http://www.slonet.org/~dkrehbie/minox/m1a.htm>

Source: AOL

Minox BL lens & film gate (1999-12-11T08:15:58)

Mark Hahn wrote:

> I also thought about getting the BL too, until someone on this list brought
> it to my attention that the BL has a flat focal plane, but with the same
> lens as the B so it isn't as sharp as most other Minox. . . don't know how
> big a difference there really is.

I find that hard to believe. The "Complan" lens of the A, B, and early C models does require the curved film gate, whereas the "Minox" lens does not. My copy of Hechmann's book lists ALL of the BL models with the "Minox" lens. Perhaps there is another source for this information?

Don

Source: AOL

Re: Minox BL lens & film gate (1999-12-11T10:45:34)

We get into this every once in a while. I first noticed a difference between the "Minox" and "Complan" lenses when I was checking a used LX, I had just acquired. I sandbagged my IIIs, C and the "new" LX on the roof of the Chemistry Bldg. and photographed the nearby air conditioner, stadium with light standards a half mile away, and downtown buildings over a mile away. I used High Contrast Copy Film (ASA 3 or 6, its been a while). My first reaction was that the LX did not have the "Snap" of the IIIs. I then discovered that neither did the C. It is more a "feeling" than overwhelming visual experience, and probably not evident in enlargements less than 8x10 inches. At the time I was into my "Gee Whiz" phase of Minoxery and making 16x20 inch prints on RC paper (sharper images than fiber paper). The phenomenon has been confirmed for me a number of times. My "impression" is that my "Complan" C provides this "snap".

To exploit the difference, there ARE some considerations.

1. Film of lesser fineness, T-Max 100, even AgfaPan 25, will not necessarily demonstrate the difference.
2. A steady camera support in the form of a tripod, sandbag, or youth, is necessary.
3. Focus is critical.

These largely defeat the purpose for which we love the little gem, and thus are

rather irrelevant. Tripods and long exposures are the realm of larger formats, where larger negatives produce MUCH better negatives anyway. So, why do you carry an 8x11mm Minox? If your reason is similar to that of the inventor, the difference between the two lenses is of little interest. Just go take good pictures! YOU (and I) are probably responsible for a MUCH greater loss of quality than the camera!

Don

Source: AOL

"Minox" Bs (1999-12-11T11:00:38)

Heckmann shows Model B production continuing until 1972. The "Minox" lens was introduced in 1970 in both B & C models. A rough guess based on Heckmann's serial number chart, shows roughly 379,560 in the 1958/1970 range, and 4.766 in the 1970/1972 range. Interesting, it was there in his book all the time - I just hadn't noticed

If it has a "Minox" lens, I would venture that it indeed does have a flat film gate.

Thanks. I just learned something.

Don

Source: AOL

Slitter blades (was Camera abuse) (1999-12-12T08:02:33)

James -

I believe you asked about the blade angle and penetration depth. I have used both the "moving film" and "moving blade" type slitter, opting for the moving blade or "flatbed" design because of ease of construction. It worked perfectly, after dark, on the washing machine, for years. The blade penetration and angle ARE semi critical in my opinion, as is the backing material. I chose double edge razor blades because they were the thinnest and most readily available, and angled them so that only the corner cutting edge was used - as illustrated at -

<http://www.slonet.org/~dkrehbie/2photo/slitter/build.htm>

As noted, I use museum board as a base because it is rather soft and allows the blade to easily penetrate.

Don

Source: AOL

Re: Digital printing (1999-12-20T08:42:44)

George Maltezos wrote:

- > and that Epson printer will be spitting out Minox 8.5 X 11 full size sheets
- > that look like 35mm in no time
- > (well almost!)

Thank you for the wonderful reference. Tham Kok Leong runs a wonderful site with much useful information. If interested in digital work, one should check in frequently.

You are correct about the value of the site in question. I spent several weeks with the Epson Inkjet list before leaving because of the volume. The problem I have with the article in question is that I'm at a loss to know why nobody has done this with Tri-X film. I am sure that the grain structure is such that it is useless in a 35mm camera, and all of the great images that have been made therewith should be trashed.

I was severely criticized by some "experts" on the Epson ink-jet list for even thinking that the old original Epson Stylus Color printer could make a worthy B&W print WITH BLACK INK. Interesting. There are several people around the world, some whose names you would recognize, who would disagree. I have a 10x14 print from a Minox negative in the private collection of a VERY discerning individual, and 10x14 inch prints from 35mm negatives that have passed muster with some master printers.

Do they survive examination with a magnifying glass? Well, since I have never taken a magnifying glass to a Stieglitz print or a DeCarava print, I don't know. Are they "archival"? NO! Can I make contact printing negatives with the old printer and black ink? NO. Can I make contact printing negatives with a NEW printer and black ink? NO. Does printing with colored ink provide better tonality and a finer dot pattern? Of course! Does printing with colored ink

yield B&W prints? NO! Can "quadtone" inks be substituted for the CMY inks and make great B&W prints? YES! Would I RATHER have a "quadtone" print from an Epson

Photo 1200 or 900 printer, than a black ink print from my old printer? Of course. Could I tell the difference from 6-8 feet? Probably not.

Would I prefer an image on a 35mm negative to one on an 8x11mm negative? You betcha! Would prefer a 120 negative, or a 4x5, or an 8x10? Yup. Should I trash all of my Nikon slides and keep only the Leica ones? I'm sure there are those on the Leica list who would say yes.

Would I ever sell an ink jet print? No. Would I give an ink jet print as a gift? I have, but only with the knowledge that it WOULD fade with time and was "temporary".

Can I make prints (even from Minox negatives) with black ink and a 720ppi "fine" setting (which is what the old original Epson Stylus Color printer did), which can be exhibited without detection with fine silver prints in a gallery setting? Been there, done that! - since 1995.

The point is that one ought not to be too concerned about microscopic examination of the dots. JUST GO MAKE PRINTS! If they look good from 6 feet, BEHIND PLEXIGLAS, they're fine! If they have the appearance of a fine silver print, they'll probably pass. Fooling the eye is easy, we do it all the time with our depth of field compromises.

Don

Source: AOL

Re: kodak Gold Max (Fri, 2 May 1997 06:49:16 +0100)

Donald E. Stowe wrote:

>

> I looked on Kodak's web site and this is what they have to say about the

> New Kodak Gold Max film:

>

> Self adjusts for pictures in most light and action conditions.

This idea is not a new one! Ilford has for years had XP1 and XP2 which, although a black-and-white film, is based on color (C-41) technology.

XP2 handles OVERexposure quite well, meaning that, having a long curve, it does not block-up the highlights. If you do this with silver based film, you get boulder sized grain, leading to the long standing admonition to use the minimum necessary exposure. With the "chromogenic" films, overexposure makes a denser negative, but also seems to reduce the apparent grain. There are members of this group with extensive experience with it who can better describe its range.

Kodak recently introduced (quietly) PJM Ektapress "Multispeed" which has received excellent reviews and, in the 35mm rolls I have exposed, has shown very fine grain, high resolution, and excellent color (for my taste). I currently have a test roll being processed at MPL. PJM is DXed at ISO 640 and was exposed beautifully in my wife's point-and-shoot, where I suspect the extra speed leads to greater depth of field and provides 3x5 prints of beautiful quality.

My Minox test was made with an LX set at ASA 400 and set on A(uto). We'll see.

It will be interesting to see the results of some SEERIOUS tests with ten stop scenes at a wide range of over and under exposure.

Don

Source: AOL

Re: Re Kodak Gold Max (Fri, 2 May 1997 06:57:59 +0100)

Michael Goldfarb wrote:

> (Don K, you were
> going to test the Ektapress are part of your emulsion tests, no? Did
> you? Do you think a multispeed film in a submini would be worthwhile?)

I printed an 8x11 section from the middle of a 35mm frame made with my wife's Pentax and was impressed with the resolution. There is grain, but it was worth trying in the Minox. My LX test arrived at MPL on Tuesday, so we should know here next week (weekly stagecoach to San Francisco, you know).

Don

Source: AOL

Kodak T400CN & Ilford XP2 (Fri, 3 Apr 1998 12:53:15 -0700)

All this talk about the Kodak T400CN chromogenic B&W film caused me to get back to what I started when the sun was shining (I can almost remember when). I slit some of each, loaded the LX, set it to "auto" with an ASA of 400, and headed for the harbor. Yesterday I found the negatives and spent a bit of time in the darkroom. I like them both. One is a "dull-day" film and the other a "bright-day" film. I have posted a bit, with prints, at -

<http://www.slonet.org/~dkrehbie/2photo/negative/film/test.htm>

Don

Source: AOL

Re: : Discontinued: Kodak Royal Gold 25 (Ektar 25) (Fri, 4 Sep 1998 19:20:49 -0700)

Peter Zimmerman wrote:

> I don't know the real story on the emulsions for movie film...

When I was an usher at the local theater in 1939-43, I used to watch the projectionist splice in newsreel and coming attractions and fix bad spots. He used to save me frames of airplanes (WWII) if he had to splice a newsreel. I still have them and looked the other day. Boy, are they crummy quality. It is a perfect example of the "viewing distance" phenomenon.

Don

Source: AOL

Re: Radio silence! (Fri, 5 Dec 1997 11:21:38 -0700)

Michael Goldfarb wrote:

> Hey, is everybody submini'd out? No posts in more than two days? I'm
> going through withdrawal...
>
> Just kidding. It's just VERY unusual to go this long without somebody
> contributing something. Alas: I have nothing significant to contribute

> myself. So I'll shut up.

>

> MSG

It's raining, it's pouring, in "sunny" California.

A great day to be in the darkroom, so I AM busy in the darkroom trying to figure out the difference between the old Ilford Multigrade FB and the new Multigrade IV FB. I am working on X-Mas prints of a VERY tricky image with glacial polish which has to look like shining rock with texture and detail, while at the other end of the luminance range are tree trunks in the shade which must show the bark, while the midrange carries the image. So - any change in the paper characteristic curve gives me fits, and at this point, I think there are subtle changes. NUTS! I should have bought a lifetime supply of paper in the '60s and frozen it!

Don

Source: AOL

Re: scanner for minox (Fri, 5 Sep 1997 09:14:09 -0700)

Happily, my experience is confirmed by Godfrey's work. I have had drum scans made of Minox negatives (expensive) and found that a "best possible" silver print scanned to produce a final image size at 300 ppi is superior.

I have tried to put together some thoughts on the subject in the "Digital Step" and "Final Print" sections of -

<http://www.slonet.org/~dkrehbie/2photo.htm>

I have made 10x13 inch B&W prints from flatbed scanned 6x8 Minox silver prints which have passed inspection by our photo society when mounted and framed behind Plexiglas. BUT !!! - THE INK FADES. I have a B&W print in an office, with fluorescent lights, that is becoming a pale sepia toned print in less than 2 years, and sunlight will kill it quickly. I have a reproduction of my fade test somewhere in the above references.

There is a new technology afoot with what the company (ALPS) claims is "permanent" ink. They are printing a sample for me and I will report when I get some data.

BUT, you can do things digitally that you would kill to be able to do in the darkroom.

Don

Source: AOL

Re: scanner for minox (Fri, 5 Sep 1997 12:44:27 -0700)

Peter Zimmerman wrote:

- > isn't it true that a digital file can be written accurately to a
- > negative which
- > can then be printed?

Yes. My experience has been less than exciting, BUT we have a local artist who last year practically swept the awards (including "Best of Show" to add to a "Best of Show" 2 years ago) in our annual juried show at the Art Center using just that technique. He scans negatives, manipulates and combines them in Photoshop, and has the final file exposed on film with a film recorder. He then goes to the darkroom and makes mind blowing 11x14 and 16x20 silver prints. There is a lot of "lost" data and the result must be a VERY strong image to pass. You don't get 4x5 sharpness even with 4x5 negatives made with an 8K film recorder. but it sure looks good on the gallery wall.

The other alternative is to go from a Photoshop file directly to a print. There are several organizations doing this now. I believe Ilford's Printasia claims to have "C print" stability with a Ciba developed dye system.

Don

Source: AOL

Re: Bokeh pictures (Fri, 5 Sep 1997 21:09:00 -0700)

Pete Zimmerman wrote

- > Don K will also be posting a copy of the same brief notes on the Minox
- >
- > developing tank that can already be found on the MPL Website. It
- > should
- > appear with his own comments on the tank.

The article on the Minox Developing Tank by Pete Zimmerman can be found at

<http://www.slonet.org/~dkrehbie/6dev2.htm>

If you have one or are contemplating acquiring one, it is a must.

Don

Source: AOL

Re: fading printed material (Fri, 7 Aug 1998 16:09:44 -0700)

Mark Langer wrote:

- >
- > Anselmo Lastra writes:
- > > I've been using a Epson Photo EX printer lately and have been very
- > > happy
- > > with the quality (color and B&W). I scanned and printed a sepia-toned photo
- > > from the 20s that turned out beautifully.
- > > If any of you have experience with coating the "prints" to preserve
- > > the color, please post.
- > >
- > Another photo chat group that I belong to has a member who works for
- > Hewlett Packard. He recently informed group members that the inks used
- > are very susceptible to ultra-violet light, and suggested the use of UV
- > filtering glass when one frames the prints.

I have made extensive fade tests with the inks for the Epson Stylus Color Printer. In my tests, Magenta FADES! Cyan and Yellow seem quite resistant to even direct sunlight. I have tried Plexiglas, UV Plexiglas, UV spray and Magenta FADES! I have a beautiful 10x14 monochrome (black ink only) print hanging in my home (behind Andersen "Sun" windows, which, after 2 years is

just beginning to take on a marvelous subtle "toned" feel. It is hard to see, but I sense a softening of the image and when placed next to the silver print, I can just barely tell the difference in print color. An identical print has been hanging in an office with fluorescent lights and is now a gorgeous beige, soft and delicate. I wish I could "fix" it - but alas the fading process will continue. Apparently even the black ink has some magenta dye in it. I am comfortable with my ink jet prints in a room with UV protection and NO direct sunlight, and suspect that exhibited prints will last quite a while. I have not personally found a UV spray that will protect from direct sunlight (even accidental!)

I have tried in vain to get a definitive answer from Epson, HP, and Ilford (which claims to have fade resistant dyes developed by Ciba - but only for their own printers) without success. I have not tested the inks that come with the newer models of Epson printers, or the HP or Canon, but I would CERTAINLY make a print, cover half, and stick it out in the sun for a couple of days under a piece of Plexiglas. You might even cover parts with whatever UV protection you wish to test. Only YOU can test YOUR work for permanence. The only printer I have tried which passed the "several days in the sun" test was the ALPS 1000.

I have documented the tests I did several years ago at -
http://www.minoxlab.com/DK_DIGITAL/fade.htm

Don

Source: AOL

Re: 15/36 exp take-up spools (Fri, 7 Aug 1998 20:58:31 -0700)

Michael Bower wrote:

>

> In looking through my take-up spools (in prep for trying my new splitter
> "live"), I find that I have ONE 15 exp spool and lots of 36 exp spools.

> So some questions:

Michael -

I never use 15 exposure spools in either the "count down" or the "count up" Minox. As long as you start at the beginning, just as you would with a full roll, the camera doesn't know when the film runs out - BUT YOU HAD BETTER! I

am not a historian, but I suspect that the thick walled 15 exp. spools were born with the advent of the "count down" models and the idea of loading at the 17mark, to count down to zero. With 15 exposure rolls, I find it just as hard to keep an eye on the counter whether I am starting at 15 and approaching zero, starting at 36 and approaching 21, or starting at zero and approaching 15. Any time the camera "thinks" there is a full roll, you may use the thin walled spool. When you pull the film is up to you.

Don

Source: AOL

Re: Minox tank processing (Mon, 3 Feb 1997 10:12:45 +0100)

Does anyone know how much actual developing agent is needed to reduce 1 square centimeter of silver halide?

I suspect each film is different, each developer is different, each dilution is different, and each agitation scheme produces different results. BUT there should be a minimum amount of developing agent which will assure the desired result.

A 250cc Nikor tank with 1:25 dilution of developer has 10cc of developer. At 1:50, it has 5cc.

If a Minox roll has 1/10 the surface area of 35mm, that would mean either 1cc or 0.5cc. A Minox tank, nominally, holds 53cc, which at 1:100 would mean 0.53cc of Rodinal.

I have for years suspected that Tech Pan in particular, and any film in general, suffers from too little developing agent. My Tech Pan Minox negatives developed in a 250cc tank ALWAYS look better than my 35mm Tech Pan developed in the same 250cc tank.

If I want a 0.1 density above fb+f at the low end and 1.3 density at the high end, I need to be sure the developer is not struggling to give me the 1.3. Anyone know of a definitive answer for this question?

If anyone has evidence that 0.53cc of Rodinal is adequate for a Minox roll of Tech Pan, I will start using my "mint" Minox tank.

I have used the "replacement method", rather than agitation. It is certainly a viable alternative, assures adequate developer, and gives good results..

Don

Source: AOL

Re: Minox tank processing (Mon, 3 Feb 1997 20:08:45 +0100)

Martin Tai's work with the Minox tank is very illuminating and thorough.

It is not often people question the conventional wisdom. What he is doing is important and well worth the effort. The only reason I injected the issue of enough developer is my observation that my Minox negatives seemed to have a "fuller" more robust (not to be confused with contrast) feeling than my 35mm when each was developed in the same 250cc tank. I have no explanation. I chose the myth that having more developing agent per square inch made the difference, but don't we always use mythology to explain the unexplained.? If the volume of developing agent per area of film makes a difference in the appearance of the image, then we have a whole new ballgame.

I suspect the real question revolves around the increase in the concentration of byproducts (bromides) in the solution and their affect on the action of the remaining developer. The only way I know of to completely rid the system of this contamination is to pour out the old and pour in new developer at some interval. I am not sure this is either necessary or advisable. I JUST DON'T KNOW!

What I DO know is that image appearance is affected by the amount of developer AND the total volume of the solution.

To sidestep the whole question, I develop Minox negatives in 250cc and 35mm and 6x6cm in 500 to 650 cc of solution.

Don

Source: AOL

Re: Minox huge prints (Mon, 3 Nov 1997 22:45:35 -0700)

#1

Since dynamic range is largely a matter of negative development, and/or print manipulation, why is scanning a negative better than scanning a print if both provide a grayscale range from zero to 255 in Photoshop?

#2

Scanning a Minox negative at 4700ppi provides a total of 3,013,000 pixels

Scanning an 8x10 inch print at 300ppi provides a total of 7,200,000 pixels

Scanning a Minox negative at 2700ppi provides a total of 9,762,788 pixels

Scanning an 8x10 inch print at 600ppi provides a total of 28,800,000 pixels

Scanning a 16x20 inch print at 300ppi provides a total of 28,800,000 pixels

Scanning a 35mm negative at 4700ppi provides a total of 29,582,987 pixels

It looks to me like drum scanning a 35mm negative at 4700ppi provides about the same pixel count as scanning an 8x10 print at 600ppi.

Why is scanning negatives better than scanning prints?

Are we not interested in the maximum pixel count?

Don

Source: AOL

Re: TMX3200 (Mon, 4 Oct 1999 10:26:49 -0800)

- > So instead of buying an enlarger, I should probably look at putting
- > the \$175(including daylight tank&thermometer) towards a film scanner.
- > Are the results are just as good doing it the traditional way?

NO! --- well, it depends on your objective. See

<http://www.slonet.org/~dkrehbie/2photo/digital/which.htm>

Don

Source: AOL

Re: Developer comments wanted (Mon, 6 Sep 1999 07:04:38 -0800)

Mark Hahn wrote:

- > If anyone has a printer that they are
- > really blow away with for photo output I would love to hear about it.

A bit back, I mentioned making contact prints from negatives made from Photoshop files. I now have an Epson Photo 1200 and just yesterday finally tweaked my adjustment curve to where I wanted it. I now have 8x10 silver prints on Ilford Multigrade IV FB that show NO grain or dots and I think are indistinguishable from silver prints made with an enlarger.

Of course there is less detail than from a contact print from a Tech Pan negative of the same size, but the print size at which the Epson 1200 diverges from a 35mm Tri-X negative will be an interesting experiment. In my view, this is truly an awesome printer. There are two ways to describe the result. With a loupe, and without. Without the loupe, the differences between a print from an Epson 1200 contact print and an enlargement from a Minox negative are nonexistent. With a loupe, depending on the film used in the Minox,, some fine detail may be lost, but the contact print will probably have less grain - and that brings up the next point.

The printer dots are obviously larger than silver clumps, of even Tri-X film. BUT, as the silver clumps get enlarged, they approach in size the dot clumps from the Epson 1200. There is therefor an enlargement size at which the Epson 1200 "grain" is no worse than that from enlarged Minox film, and that point is dependent on the film and developer chosen. It will be interesting to see just how large a print is required for the Epson to produce a sharper print than a direct enlargement from a Minox Tech Pan (or Fuji Super HR) negative.

The 1200 surely does seem to eat ink though.

Don

Source: AOL

Re: techpan (Mon, 9 Aug 1999 22:11:36 -0800)

Mark -

Tech Pan is sensitive to development, so I can best describe my experience (from its introduction in the '70s) with Rodinal and sodium sulfite. The developer is important because it can make a difference of up to 2/3 of a stop AT ZONE I, and that can spell the death of a good negative. I have had good luck at airshows in bright sun with my IIIs set at 1/200. I usually set my LX and C at ASA 40 for auto exposure. For critical work with either the Minox, 35mm or 120, I rate it at ASA 25 and so set my Pentax Digital Spot Meter for establishing the Zone values. I have found these settings also work well for PMK Pyro development.

When you ask "what kind of underexposure still yields usable negatives?", I can only answer, how much shadow detail are you willing to lose? The fact is that underexposure will yield useable negatives only if the low value areas are minimal or if you are using black as an artistic instrument. Increased development will increase the CI much faster than the low value density. With Rodinal AND sodium sulfite, the toe is rather abrupt, so you get density rapidly - with Technidol, it takes longer to build density, and although the Zone V densities may be the same, the densities at Zone I through III will be less. To confirm my own suspicions, I did a quick and dirty test some time back, the results of which are shown at the bottom of the page at-

<http://www.slonet.org/~dkrehbie/2photo/film/choice/pers.htm>

Minox ASA 25 film is AgfaPan 25, an excellent film, not capable of the edge sharpness and fine grain of Tech Pan, but more forgiving of exposure and development.

My favorite film for critical work with the Minox is now Fuji Super HR developed with PMK Pyro. But is effectively an ASA 3 film which works perfectly in "auto" mode at the ASA 6 setting of my C. It is NOT a good foggy day film without a tripod or support of some kind! Tech Pan IS.

Don

Source: AOL

Re: Little camera? (Mon, 9 Mar 1998 18:58:28 -0700)

Karasev, Alexander wrote:

- > ImageK employs an innovative area sensor grid as its image capture
- > device. It is based on CMOS technology, rather than conventional CCD.

Back in the '80s when camcorders were expensive, I looked at all available. The color from the VHS machines was TERRIBLE. The color from the 8mm was much better, but not all that good when tested seriously - EXCEPT for a unit (which I bought) made for Pentax (and Minolta) which used CMOS technology rather than CCD. I still use it, and the color is still better than any new machines I have seen. Is this the CMOS vs. CCD? Why? If CMOS provides so much better color, why is CCD so dominant?

Don

Source: AOL

Re: Thanks again (Mon, 9 Nov 1998 13:40:58 -0700)

MARTIN TAI wrote:

- > 2) I find that scratches on my Minox negatives are caused by
- > dust particles on the slit bed, ie before even
- > put the film into the cassette or camera.

Precisely why I use a flatbed slit and a paper cover sheet when slitting. I also have a cheap negative ion generator and \$20 "drugstore" air purifier which I run for a couple of hours before slitting. THEN, after slitting, I roll the film on a dowel, pulling it through a cloth that Light Impressions calls a "Dust Magnet". All of this presumes that no dirt has lodged in the cassette, or falls on the exposed film section after loading the cassette or before or after loading the film into the camera. I have a Nikon scanner and have not noticed small abrasion marks, only REAL scratches which come and go along the film. I have convinced myself that they are caused by debris in the light trap, having had them with factory loads even during the period when the cassettes had no felt. My best guess is that the scratches I get are caused by rocks which get trapped in the opening of the takeup side and have nothing to do with slitting, but rather dirt introduced when loading (or unloading) the camera. Joel has a solution for this at -
<http://www.slonet.org/~dkrehbie/2photo/slit/slit.htm#joel>

Don

Source: AOL

Re: Minocolor Pro/ Fuji Reala color film (Sat, 3 Jan 1998 16:49:05 -0700)

James Hewitt wrote:

> Did I read on this list that Minocolor Pro and Fuji Reala are both the same
> product? Different format of course!

It took me a week Fuji's 800 number to get an accurate answer and two tries on their part to get me the right stuff, I did get a sample to try and a 20 pound packet of "glossies" about Fuji film. The one on Reala shows the NEW Reala and Reala. It is the NEW Reala you want. It has the word "NEW" in red letters across the box. The literature states that it has a grain size 1/3 the size of the older Reala. Don't let anyone con you into thinking that boxes with Reala and the ones with NEW Reala are the same stuff. I am told that Minocolor Pro is indeed NEW Reala.

The other issue is with the sale of "graymarket" film. The disadvantage of being halfway between two major cities is that none of the stores can mount large enough orders to get the attention of the manufacturers. Hence, they all get their film from "Jobbers", who pass on graymarket film. I have discussed this with Fuji and they tell me it is legal. It REALLY irritates me that the only "Authorized Dealer" for Fuji film is Long's Drug.

Don

Source: AOL

Re: submini.com (Sat, 3 Jul 1999 11:04:26 -0800)

Gentlemen -

Don Thayer and MPL certainly don't need me to defend them, but I do hate to see unfair attacks on someone who understands and loves the Minox second to none. He is dedicated to the preservation of the format and support for those who use it. He maintains a non-predatory pricing structure which allows others to survive, while striving for the best possible quality. My read is that he does not want to get involved in the multifaceted arena that Micro-Tech and others have successfully managed. There is room for "specialty" businesses, selling "unofficial" film and empty cassettes. As the MPL site illustrates, MPL

supports only "factory" equipment and supplies, and I suspect that the attempt to be helpful by reselling cassettes at \$1 was more trouble than they anticipated.

As for the "\$400 film slitter", when buying my 1954 VW, I could see no useful reason for the dealer to have Porsches in the showroom either.

I frankly don't much care whether a person uses a Minox or not, but I do think it a bit tacky to gripe about prices for a service that is available no where else. I don't need MPL or DAG to use a Minox - UNTIL I need help with something I can't fix, or film I can't develop, or color prints from 8x11 negatives.

In 1956 I bought 10 rolls of film, made a slitter and didn't buy another cassette until sometime in the '80s. With TLC, they last forever . I currently have 12 (new ones with the felt light trap) in service (4 Tech Pan, 4 Super HR, and 4 FP2 Super). I have lost track of the number of times they have been loaded, but I probably average 1-2 rolls per week.

If your Minox is in good working order, you have 5-10 cassettes, and an under \$10 slitter, depending on your age, you should be set for life - UNLESS you want color prints!

Source: AOL

Re: Olympus Pens (ERROR) (Sat, 3 Oct 1998 07:24:22 -0700)

Don Krehbiel wrote:

> I have never bought Pete's argument about AREA, feeling that the enlargement factor was a better measure of the relative size.

BLAST! That surely didn't come out right. I ALWAYS buy Pete's arguments, they are not only accurate, but useful. I just don't find the use of negative area as useful as linear measurement for practical work in the darkroom, where I spend a considerable amount of time.

Don

Source: AOL

Re: 50 exposure MINOX (Sat, 4 Apr 1998 06:40:00 -0700)

My Tech Pan "tech sheet" lists 35mm Tech Pan at 4 mil ESTAR-AH (whatever that is), and the bulk reels are 150 feet rather than 100. That being the case, I would suspect that any of the microfilms, like Fuji Super HR, which come in 2.5 mil would theoretically work. Kodak lists the base for the 120 version of Tech Pan as 3.6 mil acetate and I can testify that it is a LOT tougher to get onto a spiral reel than AgfaPan. I have to wonder if films have gotten thicker - didn't Minox package Tri-X in 50 exposure loads?

Mark Hahn wrote:

- > Does anyone know if any modern b&w films can be loaded for 50 exposure in
- > MINOX cartridges?

Don

Source: AOL

Re: 50 exposure MINOX (film speed) (Sat, 4 Apr 1998 17:51:03 -0700)

Michael Goldfarb wrote:

- > Any of our senior members remember when the change occurred?

Thanks Michael for not saying "Any of you old geezers- "

This "one" remembers various rating systems, Weston, Kodak, ASA, Scheiner (sp?), etc. Each was based on some value somewhere in the response curve - much like the differences between "gamma" and "contrast index". My recollection is that in the early editions (late '40s) of AA's "The Negative", Ansel recommended establishing a threshold of 0.1 density above film base plus fog as a personal film speed. The shape of the "toe" also contributed to the confusion. What the manufacturers stated on the package depended on the system being used. It is much like the speeds stated for microfilm. There is NO WAY that the speed of Fuji Super HR is ASA 80 IN NORMAL PICTORIAL PHOTOGRAPHY, but they legitimately state it as such for its intended purpose - MICROFILMING. The Kodak literature stipulates ASA 200 for Tech Pan in some applications.

Since the confusion was still present in the late '40s and early '50s, and seemed to have disappeared in the '70s, I suspect the "standardization" occurred in the '60s. BUT in the '70s, most of the photographers I know were using "ASA 400" Tri-X at "three- something" and "ASA 64" Kodachrome at ASA 80. So did anyone fix anything?

Don

Source: AOL

Re: Success! (Sat, 4 Jan 1997 08:44:41 +0100)

Godfrey DiGiorgi wrote:

> The darkroom is laughable. It's my bathroom, etc.

Sounds VERY familiar. Did some of my best work in a similar setup.
Even Cibachrome.

> I still don't have a timer, ...

Get a Lux kitchen timer at the hardware store, or an old metronome, or
a little pociet "count-down" calculator, etc.

> This is great fun.

Of course it is!

> I don't have any place to put them on a website...

How about the SubClub?

<http://members.aol.com/xkaes/index.htm>

I think we should USE that resource. E-mail is a bit iffy for sending
images since the local servers get clogged and is relatively slow.

> Not that I think they're deathless art...

We ALL feel that way

> but if folks want to see them...

I do!

You have just described what it is all about. FUN. I think we all get
too serious and paranoid about our work. Everyone needs to read Edward
Weston's descriptions of how he worked. Your setup is probably already

better than his. We all need to be a bit more "Westonian" .

Don

Source: AOL

Fuji Super HR film (Sat, 5 Jul 1997 20:27:34 -0700)

I just received sample strips (developed) of Fuji Super HR film. Included are strips of 35mm unperforated, 5 mils), 16mm (unperforated, 5 mils), and 16mm (unperforated, 2.5 mils) - all three Polyester base. The data sheet indicates that it is available in 35mm, 15mm, and 105mm spools ranging in length from 100 feet to 200 feet. The exposure index is listed as 80 at a density of 1.2 above fb+f. I have no feeling for the conversion factor to estimate the EI for full scale negatives. Resolving power is listed, at 1:1000, as 850 lines/mm. The supplier in San Francisco will let me know when the 35mm is available. Anyone know what is the relationship of this film with the HR and HR-U we have been discussing? (which Fuji has been telling me is discontinued)

I will print one of the samples tomorrow.

Don

Source: AOL

Re: Check out my Minox article in RETRO! (Sat, 5 Sep 1998 20:48:17 -0700)

Michael Taglieri wrote:

> nothing could be more misleading than the one in the Subclub web page
> [quoting from memory] that subminis are as small in operating costs as in
> size....

Depends on what you do with a submini. I use B&W film with 4 Minox loads per each 36 exposure 35mm strip. The final DEVELOPED cost per 36 exposure Minox roll is in the range of \$0.65 for Tech Pan and \$0.27 for Fuji Super HR. It is the least expensive way I know of to make negatives.

I am sure you are referring to the cost of having color film developed and printed - with emphasis on printing. The cost of simply developing color film is no greater for a Minox roll than 35mm - at least in my area, and MPL is

about the same for develop only.

Using a Minox costs next to nothing until you start making prints and then the negative size makes absolutely no difference to the print cost - it is the print size that sets the price.

I would give up photography if I had to pay 35mm (or even worse, 6x6) costs all the time. I have been through the "study each exposure" with REALLY expensive sheet film cameras, and fully understand the difference, but the Minox gives me, by far, the least expensive cost per frame.

Don

Source: AOL

Canon Sure Shot Z135 (Sat, 6 Dec 1997 15:20:13 -0700)

I hope I won't get expelled for asking a 35mm question. My daughter just lost her P&S camera, and you know dads, I just can't let her go out and get anything she wants. I did stumble on the Canon Sure Shot Z135 and couldn't believe all the neat controls. It seems like the 38mm to 135mm zoom range would be quite nice for a "soccer mom" and grandpa might have the benefit of neat shots of granddaughter making a goal!!! Couipled with Kodak Ektapress PJM film, even the f/8.9 aperture at 135mm should provide a 1/2000 sec. exposure.

Anyone have negative info on this one, or a suggestion for a better choice.

I an putting my personal e-mail address as a return so the responses will not clutter the sub-mini airwaves.

Thanks, Don

Source: AOL

Cassettes with, and without felt (Sun, 2 Feb 1997 20:05:53 +0100)

Peter Zimmerman wrote:

- > ACME cassette have a small amount of felt serving as a light trap in each
- > chamber. For that reason their pieces are *not* interchangeable with pieces
- > from Minox-supplied cartridges.

Everyday we learn something NEW! I just developed a roll of newly acquired AgfaPan 25 from MPL and the cassette HAS a felt light trap. So, my old '70s version cassettes do not have felt, and the new ones do!

Anyway, be sure to CHECK!

Don

Source: AOL

Re: Developer comments wanted (Sun, 5 Sep 1999 07:22:09 -0800)

Mark -

FP4+ is a very fine 120 film when developed with PMK Pyro. I doubt I would use it in 35mm format, although I suspect the grain is no worse than KB14 and that is one of my favorites for 35mm. I would never even try it in a Minox as the grain magnifier when enlarging 120 negatives makes it clear that there are much better Minox films.

As for scratching, there IS a solution called Photoshop. I know that is not the answer you were seeking, but it has allowed me to print some negatives that were so damaged. I have always felt that the curved film gate, used with the Complan lens in the early models, exasperated the scratching problem, which I have had with my IIIs and factory loads of AgfaPan for its entire history.

I follow a program similar to yours and still occasionally have scratches. Goes with the territory. Use Photoshop and make contact printing negatives.

Don

Source: AOL

Fuji HS-U? (Sun, 6 Jul 1997 07:27:23 -0700)

- > HS-U is possibly the best film I've ever used in subminiature.
- > I prefer E.I. 50 because it allows a lot of room for 'guess-
- > timed' grab shots. I consider Tom Bosma reigning champ of
- > Super HR w/Minox. Did you see his work on cover of July '97
- > "Subminiature Times"? Al Doyle

Just what Fuji films ARE currently available? When I originally talked to Fuji, they denied any knowledge of microfilm. Now, I have in my hand a sample of Super HR. What is HS-U?

Don

Source: AOL

Re: H&W film developer (Sun, 9 Aug 1998 13:52:00 -0700)

Nick -

Eiki Takahashi published this a couple of days ago so I hope he doesn't mind my sending it again.

Here's how to prepare H&W developer (stock solution):

1) Mix

Hot water (60 C)	40ml
Phenidone	1.1g
Hydroquinone	0.16g
Sodium sulfite (anhydrous)	1g
Sodium carbonate (monohydrate)	4.6g

2) Add water to make 120ml

3) Add sodium sulfite (anhydrous) 8g

4) Add water to make 132ml

I don't understand why, if we are going to have 120ml AFTER mixing the first ingredients, we are asked to mix them in 40 ml. I think I can understand adding the rest of the sodium sulfite AFTER the sodium carbonate IF the carbonate will not dissolve in a high concentration of sulfite.

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Source: AOL

Fuji film (Sun, 9 Mar 1997 20:31:55 +0100)

I feel like i'm intruding, and hate to change the subject, but I have a question about Fuji film. I can't find Fuji Super G film in any speed but 800, where it is called Super G Plus. I can find Super HGV in both 100 and 200. Is this an old film or the new one?

--

Don

Source: AOL

Trip Film (Thu, 2 Apr 1998 11:08:51 -0700)

All this talk of film prompts me to ask what film y'all would take on a trip to Europe for use in a 35mm P&S camera. For years Kodak Royal Gold 200 has been the family staple. Fuji NEW Reala is super good, but only ASA 100. Kodak PJM Ektapress is also super good at ASA 640, but with a bit more grain. I like the idea of a speed around ASA 400 to push the camera software to the smallest aperture and greatest depth of field.

Don

Source: AOL

Re: Developers (Thu, 3 Jul 1997 16:34:19 -0700)

i also get the IlfoPro newsletter and was interested in the comment about

XP2. Tonight I will print the XP2 negatives of my film test and see what it all means. Bryant likes Accufine. Ever tried it?

Don

Source: AOL

Re: Minox owners age? (Thu, 4 Mar 1999 08:20:15 -0700)

Joe -

You are undoubtedly correct about the majority, but there are still a few of us old crocks who use them. I used my first Minox in 1952 when I was 26, and am busily assembling a show of Minox prints which opens on the 13th at one of our prime local venues. Most of the work shown to date at this setting has

been large and medium format. I have taken a fair amount of heat from my colleagues when using a Minox in the field, but the work in the exhibit is entirely of images that have been made when no other camera was available. In many cases I have returned with larger equipment but found the conditions lacking.

Light is an elusive thing and that is precisely why I ALWAYS carry a Minox with the finest film I can find. Tuesday morning for the first time I can remember the full moon set over Morro Bay in a PERFECTLY clear sky with a perfect water condition. You can bet I was there with my best equipment. On the other hand, I have never seen the fog and water surface exactly the way it was when I had only the Minox, and that image is in the show.

Don

Source: AOL

Re: techpan (Thu, 5 Aug 1999 20:20:35 -0800)

Mark -

Yes. If you are careful and have a 0.1 density above film base plus fog at Zone I, the shoulder begins about Zone VIII and can be flat at Zone X. With PRECISE exposure and development, I can record detail in shaded forest and somewhat flattened high value tonality in an afternoon sunlit cumulus cloud in Yosemite. There is NO latitude with that luminance range. A typical curve FOR ME is shown at -

<http://www.slonet.org/~dkrehbie/2photo/film/choice/pers.htm>

The curves shown are Rodinal curves. Technidol and the Photographer's Formulary special Tech Pan developer give ME a longer toe and slightly longer shoulder, but the longer toe means less local contrast in the low values (shadows).

Tech Pan is a VERY unforgiving film. But worth it!

Don

Source: AOL

Re: Is there more than one way to skin a Technical Pan? (Thu, 5 Feb 1998 08:32:06 -0700)

John Brubaker wrote:

> I'm using TD-3 as my standard Tech Pan developer now. I rate the
> film at EI 50 in the LX,

I tried TD-3 a year or more ago and found it to have almost the exact curve as my Rodinal-sulfite combination . I too set my LX at 50, although I rate Tech Pan at 25. I always use the Zone I at 0.1 density technique for establishing film speed, since for critical work, with a spot meter, I want to know where shadow detail will first appear. With a camera set on automatic (like the LX or C), the overall scene luminance dominates, and experimentation indicates that I get the best looking negatives at about a one stop higher film speed. BUT, there is a loss of shadow detail, if the luminance is more than 3 or so stops below what the meter is reading (which is quite often true).

Although TD-3 is a delightful developer, and I would highly recommend it, I have never been able to achieve the "glowing" results attributed to any of the alternatives to Kodak's recommended Technidol. I tend to alternate between Rodinal - sulfite and Technidol, depending on the conditions and the effect desired. They DO, in my estimation, produce "expressive", but not qualitative differences.

For me, the characteristic curve of the film - developer combination is the most significant, establishing "personality" and setting the tonal values in the shadows, highlights, and, of course, mid-values. With the relatively "high strung" personality of Tech Pan, the trick is to get adequate shadow detail without shoving the image too far up on the shoulder. Increased "film speed", which is often achieved by increasing negative density above Zone III, usually comes with an alteration of the film's personality.

There are a number of excellent choices available for Tech Pan film - Kodak's Technidol (solid & liquid), the Rodinal combinations, Al Doyle's "Mixer", Bob Parks' "special", the special brew Pete mentioned, and many, many more. Of these, TD-3 is certainly a fine choice.

Don

Source: AOL

Re: Developing Minox (Thu, 5 Mar 1998 07:06:30 -0700)

Don -

I have found two tapes which I wish I had found years ago.

1. Blue masking tape from 3M called "Scotch Brand 2090 Long-Mask Masking Tape". I have a stainless steel Nikor developing tank and a lid that is slightly loose. A couple of years ago, I wrapped the tank top with a double layer of this tape, providing a tight seal. The tape is still there, through solutions, hot water washes and multiple openings and closings. It also comes off cleanly without a residue (I just pulled the tape off the tank to test this - only one little spot of adhesive stuck to the tank after more than 2 years - cleaned off with peanut butter). Not cheap! I use it for everything EXCEPT attaching film to takeup spools in 35mm and Minox cartridges, where I use the other great discovery.

2. "WHITE ARTIST'S TAPE" from PAMCO. This may be a local tape since the distributor is in Santa Ana, California. It is a waterproof white tape that removes without residue after the development process and had survived normal Rodinal processing. Our local artist's supply store carries it in widths from 1/4 inch to 1 inch.

Don

Source: AOL

Re: EC vs ECX Resolution (Thu, 5 Nov 1998 22:26:02 -0700)

Peter Zimmerman wrote:

> I definitely agree with Larry.

Me too!

Although I don't have an EC to compare, I do have a C with a Complan lens and I DO have prints - which I will not post because it is pointless to try to

make qualitative comparisons at 72ppi. I used Tech Pan and Fuji Super HR for comparisons and, when using subjects at various distances in the 20-30 foot range, had more good images with the ECX. A subject at other than 2 meters will probably be sharper with a precisely focused Complan lens, but that very need for focusing may well cause one to lose the image altogether. The greater depth of field of the ECX provides an extended feeling of sharpness. I haven't tried to compare the new lens with a Complan at exactly 2 meters, and probably won't since I really don't care. The ECX is good enough that I suspect my LX will retire from service.

Don

Source: AOL

Submini philosophy?? (Thu, 8 Oct 1998 20:52:32 -0700)

Per,

Great question!

No, I don't have a REAL camera. We used to say "REAL airplanes have two wings and round engines." By the same reasoning "REAL cameras use 8x10 inch wet glass plates."

> what do you answer when friends and others ask you why you use these small and strange cameras??

It's REALLY CHEAP! I can make negatives with reckless abandon and still buy a cup of coffee afterward. The film is virtually free, the slitter cost less than \$1, the developing tank was FREE, the developer is by FAR the most expensive part of the process - EXCEPT the prints which cost the same as those from Hasselblad negatives.

In the '50s I found a cosmetically challenged IIIs for \$50. The shutter blades had to be replaced so I invested probably \$90. The most expensive part was buying enough factory loaded film to have a supply of cassettes.

The Minox CAN BE the least expensive photographic instrument on the planet.

(1) I ALWAYS have it. I find even the smallest APS or 35mm too bulky to

ALWAYS be carried.

(2) I use it to explore, often finding things I will return to pursue with medium format. The film is cheap enough I can try various options, and often take an entire roll in one situation. I also use a small "viewer" with a Wratten #90 filter in it for B&W, but the Minox is still my primary exploratory tool. Often when making a 120 exposure, I will make several Minox negatives of alternate views. Often while making Minox exposures I will "see" a beautiful larger format image, hopefully having the Rollei or "new" Graflex in the trunk (but usually not).

(3) I am able to take advantage of "once in a lifetime" situations and know I can have a gallery quality 6x8 print, even though a larger camera is not available.

(4) It is a learning tool. It forces me to be precise throughout the entire process. I must "see" better, expose better, develop better, and print better. I live with the challenge that if I can't make good images with an 8x11mm negative, using more film certainly isn't going to help. If it looks good at 11x14, it certainly will also at 6x8.

All of these arguments may be valid for APS or 35mm, but the cameras are bulkier and the film (even if you spool your own - which you can't with APS) is more expensive.

This is a lengthy response to describe what basically could be said with three words - CHEAP, & HANDY, with QUALITY.

Source: AOL

Re: Tech Pan (Thu, 9 Apr 1998 13:53:13 -0700)

Wolfgang Fischer wrote:

> I thought all B&W emulsions were quite insensitive to red, I'll look
> for TechPan and try it (not only with Minox).

Tech Pan was a replacement for two films of the pre-'70s - High Contrast Copy Film and Solar Flare Patrol Film. Because of the demise of the latter, enhanced red sensitivity was added - both a curse and a blessing. One of our local artists is exploiting the characteristics with some beautiful surf

images. The technical data is available at the Kodak site -

<http://www.kodak.com/ppiHome/kodakProfessional/productsSupport/prodSupportIndex.shtml>

Don

Source: AOL

Re: agfa 25 (Thu, 9 Oct 1997 19:32:30 -0700)

Bill Hoy wrote:

> Does anybody have any recommendations about developing agfapan apx 25 in
> rodinal: dilutions, time, sodium sulfite (?) etc.

I have had good luck with AgfaPan APX 25 in Minox, 35mm, and 6x6cm formats using their recommended procedure and chart. I have used the 1:50 dilution and interpolated a curve between gamma .55 and gamma .65 to represent gamma .60. I do mix the Rodinal with my sodium sulfite solution (56g/L). I found it important to follow Agfa's agitation schedule when using their times and dilution.

Don

Source: AOL

Re: Filters (Thu, 9 Oct 1997 19:42:05 -0700)

Frank M. Snodgrass wrote:

> I just wanted to make sure I had this correct on the Minox filters. ..

Don't feel bad, I have been carrying a IIs for 40 years and can never remember. The other problem is that each film has a slightly different reaction to filters (Tech Pan's is violent). The values generally quoted are from books written in the '50s and based on film of the day.

You might do a few experiments of your own, and then BRACKET critical exposures.

Don

Source: AOL

Re: SUBMINI-L Digest - 28 Mar 1997 to 29 Mar 1997 (Tue, 1 Apr 1997 08:32:55 +0100)

Gerard van Beukering wrote:

- > ...there is a NEW minox film.
- > Name: Minocolor Pro, Colour negative film.(8x11 mm)
- > Using APS emulsion technics.

Thank you, Gerard.

Yes, it is apparently the Fuji NEW Reala and I have just had one roll returned from Minox Processing Labs (US). It is indeed spectacular!

There are two things happening here.

(1) Films are getting better and this one certainly looks good in this application. I have no idea how it compares with the other new color APS films.

(2) MPL is doing an outstanding job at both negative development AND printing.

I have had Fuji 800, Ilford XP2, and the new Minocolor Pro 100 processed at MPL and the results, both film development AND printing, could not have been better. The Fuji 800 is too grainy for my taste, the XP2 is beautiful, virtually grainless, but a bit soft. The Minocolor Pro 100 prints look like they came from my wife's 35mm. She thinks better. I think the color is better and the printing is perfect!

This film in an EC should be REALLY fun!

Don

Source: AOL

Developers (Tue, 1 Jul 1997 16:50:26 -0700)

I haven't used d-76 for years and have forgotten most of what little I knew. I have just made prints from AgfaPan APX 100, Ilford 100 delta Pro, and T-Max 100. The 100 Delta Pro and AgfaPan 100, I developed in

Rodinal with sodium sulfite. I had the T-Max developed by a local fellow who specializes in B&W and produces spectacular work with T-Max. He uses D-76. The T-Max has a much more evenly distributed grain which gives the impression of being less granular. Since the eye interprets "crisp" edges as sharp edges, the T-Max image "feels" less sharp although I think it may have captured more information.

To be fair, I suspect I should develop the Ilford film in an Ilford developer. Any suggestions?

Don

Source: AOL

Re: Minox enlarger (Tue, 1 Sep 1998 16:13:15 -0700)

I'll set it up tomorrow (I hope). The "Complan" C arrived from DAG this morning, so I will try it tomorrow morning. His note said that he had worked for 5 hours on it and still didn't think it was as smooth as it should be, but should work properly. I guess fixing these things is an artform rather than a science.

I really enjoyed yesterday's visit, and thanks for dinner - it really was good. I got up before dawn at San Juan Bautista, got out the gear, and walked into the plaza. They have RUINED the whole place. The old bell tower is gone and a fake built on an "extension". A fence is gone, and all of the great junk has been replaced with the extension to the north. So much for SJB!

Don

Source: AOL

Re: Eiki's slitter (was pink stain on tmax) (Tue, 2 Jun 1998 11:12:38 -0700)

Eiki Takahashi wrote:

> I noticed edges of the processed negative a little bit wavy.

"a little bit wavy" should not be a problem unless the film is wider than the cassette opening, and you would know that because the camera would be difficult to close. Some of my best negatives have been on film that was so narrow that the image was barely on the film edge. The transport mechanism, pulling as it does, apparently masks a lot of error in film width - as long as it not too wide, causing binding. I ALWAYS feel the edges of the film after

slitting to check for roughness indicating dull blades. Roughness is also an indication that there may be small bits of film which might come loose in the camera. Mine usually feels a bit wavy. I do have some "slop" in my trough, so the blades do not necessarily follow the exact same path each time. The blades do pass through the film and into the underlying mat board and when I took a framing class a while back, the instructor made us change the underlying mat board for each cut. I don't do that when cutting window mats, and I don't change the bat board in the slitter base as often as I should. The edges seem straighter with new mat board. The slitter does NOT have to be a precision instrument. If it works, use it!

Don

Source: AOL

Re: Long life developer (Tue, 2 Jun 1998 16:51:22 -0700)

Bill Hoy wrote:

> The can costs about \$9.

Bill, your comment a few days ago about a "heavier than air gas that comes in an aerosol can" and prevents oxidation, got me looking for my instruction sheet for the Tetenal C-41 Rapid Developer Kit. In the discussion on "Storage Life" is the comment "...protected from oxidation with PROTECTAN SPRAY (Part No. 109556)". Is that it? Anyone use it?

Don

Source: AOL

Re: Newcomer (Tue, 3 Nov 1998 07:59:47 -0700)

Pete Zimmerman has an excellent article on the use of the Minox developing tank near the end of the page at -

<http://www.minoxlab.com/cgi-local/shop.pl/page=doitself.htm/SID=670614736>

Don

Source: AOL

Re: H&W film developer (Tue, 4 Aug 1998 18:56:50 -0700)

Eiki Takahashi wrote:

> Then, I found "H&W developer"

THANK YOU VERY MUCH! I used H&W in the '50s and '60s with Kodak's High Contrast Copy Film and found it quite good. I have wanted to try it again, but sadly thought it was extinct. You have discovered a gem! Is there any record in your area of a developer called "Perfection"? When H&W became unavailable, "Perfection" proved a worthy replacement.

Don

Source: AOL

Re: Great new article! (Tue, 4 Mar 1997 08:59:02 +0100)

Michael Goldfarb wrote:

>

> should check out

> listmember Peter Zimmerman's fascinating new article at the Minox

> Processing Labs website

OK you guys. Is there something wrong with my browser? (computer?) (brain?) I don't see the article.

Don

Source: AOL

Re: A big thank you (Tue, 4 Mar 1997 09:20:23 +0100)

Peter Zimmerman wrote:

> MPL

> is so important to the survival of Minox in the US that we should do as much

> business with Don as we can.

> Don does a nice and quick job with C-41 films, and if you pay to have the film

> scanned to disk instead of making prints initially, you get decent proofs of all

> pictures at a very economical price.

I heartily agree. I have tried local processing of C-41 and it was a disaster! MPL's C-41 rolls have been perfect, although I will disagree

with Pete about "quick". NOTHING is quick at the end of the stagecoach line here in California (or is it still "around the horn"?). I do get some things from B&H but feel strongly that local business (and MPL) are essential. AND I hate making proofs of in NAY size, so the proofing feature is quite valuable.

Don

Source: AOL

Re: TechPan at EI 200 (Tue, 4 Mar 1997 21:44:32 +0100)

I hope that any experiments regarding the ASA 200 assure that the Zone I density is "0.1 above film base plus fog", Zone VIII around 1.2 to 1.3, and the shoulder beginning around Zone IX. Each developer I have tried has a different curve but the overall range is about the same.

Don

Source: AOL

Re: Volume (Tue, 6 Jul 1999 14:00:28 -0800) Ken,

I think you summed it up beautifully.

Digital processing has already invaded my workspace (8x10 contact prints of Minox images), but the "capture devices" are still at least the size of your Leica, and sample a LOT less data, so your argument for using the 8x11mm Minox is still valid.

I have to believe that you can learn not to break cassettes. I have not broken one, nor rotated a new one into my system, in the past 3 years at least. I survived from the early '70s to the mid-'90s on the same 10 cassettes, a period when I probably did the most work. ALL of them were acquired with film in them. As long as film is available, the supply of cassettes is assured.

A far more worrisome problem for me and my Minoxii is the survivability of the shutter blades and other "pieces". Parts for the older models are no longer

being manufactured. 1934 Ford tail lights are, but I suspect that is a somewhat different situation. I would be more concerned with assuring that my Minoxii are CLA'd to prevent undo wear and failure.

Don

Source: AOL

Re: Yashica Atoron Electro (Tue, 7 Jan 1997 22:50:50 +0100)

E. George Oeser wrote:

>

> is there any way I can use 400 speed film?

I have to question the need for 400 speed film with a Minox. There is a feeling that ASA 400 is necessary for successful Minox photography. If you are taking clandestine photographs in dark military installations, I suspect it is true. BUT at f/3.5 you are getting a lot of light to the film. I typically use 1/200th for bright daylight with ASA 25 film. ASA 100 film would require 1/1000th. The difference in grain and resolving power between ASA 100 and ASA 400 film is still, to say the least, noticable.

Again, it depends on the use to which you will put the camera. Perhaps the Elph is a better low-light solution anyway.

Which brings up an even more important issue. Why would you use a Minox when you have a 35mm or APS camera available. Admittedly there are situations wherein the combination of normal view and depth of field make the Minox the best solution in the absence of a view camera. But I have wished many times I had been with 35mm or Rollei after printing the Minox negative. The Minox is not a substitute for larger formats. It is just a lot more likely to be available, and a lot of FUN. If I were going somewhere I was not likely to see again, I would take the best camera I could afford. Decide what you want to achieve, then decide on the format.

Please don't expel me from the group for heresy!

Don

Source: AOL

Re: Flash for ...? (Tue, 8 Jul 1997 21:03:36 -0700)

Godfrey DiGiorgi wrote:

> Anyway, I was wondering about the Minox electronic flash unit.

Last Christmas I borrowed an EC with flash and loaded it with Tech Pan. Sitting in the living room with the grandchildren playing with a train, it produced very good negatives. It was delightful since I didn't have to focus, I just banged away and they all came out OK. I think the EC with flash is an ideal "living room" camera. Both camera and flash fit in the shirt pocket.

Don

Source: AOL

Re: Techpan HELP (Tue, 9 Feb 1999 19:51:15 -0700)

Andy,

I have posted what works for me at -

<http://www.slonet.org/~dkrehbie/2photo/film/rodinal.htm>

Don

Source: AOL

Re: Ilford Delta 100 film (Wed, 1 Jan 1997 21:43:13 +0100)

First let me say that I feel like I have found a whole new set of friends, and REALLY smart ones too. I wish all the best to you all for the New Year.

I have a friend who flew P-40s and P-51s in WWII and is in his late 70s. He has a special interest and has built a web-site which is attracting interest from all over the world. I think we have not absorbed the significance of this www and e-mail yet, but he stated the case brilliantly the other day. Every morning he has a bunch of e-mail

from around the world, and, smiling, he said "This is the best thing for me since my by-pass surgery."

Peter Zimmerman wrote:

- > I finally finished and developed a roll of Delta 100 today. I
- > would say close to the grain structure of AgfaPan 25 (APX 25).

I suspect that a Minox image with AgfaPan 25 quality is a good candidate for a bit of "digital darkroom" work. If Delta 100 is that good, whoopy.

I would like to start a discussion dealing with the idea of digitizing a print, manipulating it, making a 35mm or 6x6cm negative with a film recorder, and printing it as though it came from a Leica, Nikon, or Hasselblad. I know I can make stunning 10x14 prints on the Epson Stylus Color printer, using the Minox negative as a starting point. BUT the inks FADE. Silver technology is still the best assurance of permanence. It occurs to me that with digital technology, grain and sharpness can be "tweedled" a bit and that the Minox as a data capture device might be better than we dare to think. I know two of the group have extensive experience in these disciplines.

I suspect that this is the future of the little 8x11mm darlings. I will start things with the "Black and White Truth" as I see it.

1. Scanning a Minox negative, even on a Nikon Super Coolscan at 2700ppi, is NOT good.
2. Scanning a really good 8 x10 silver print on an HP3c flatbed scanner at 600 ppi is really good.
3. Printing a good 300ppi image on an Epson Stylus Color printer, in any size, is really good.

Don

Source: AOL

Fuji microfilm (Wed, 2 Jul 1997 11:26:15 -0700)

I have just traveled across the country, back-and-forth, fortunately via 800 numbers, full circle to the microfilm salesman in California, who was not delighted to talk to me, but civil. He IS sending me literature on the HR films and did recommend 'Information Imaging' in San Francisco. A call thereto revealed that they are waiting for samples of 35mm HR type film, are sending me literature, and will let me know when it is available. At least we now know that it is (going to be) available in 35mm for slitting, AND 35mm camera use. I will keep at this and faithfully report.

Don

Source: AOL

Minox C electronics (Wed, 2 Sep 1998 17:17:26 -0700)

Is anyone REALLY familiar with the electronics of the Minox C - specifically what happens in auto exposure mode when the light and film speed require more than 1/15 second exposure (the maximum manual setting) - and why auto exposure works as long as the shutter speeds are within the "manual" range - but not in really low light. I am not interested in getting into a discussion, just need facts, so a personal response would be appreciated.

Don

dkrehbie@slonet.org

Source: AOL

Re: Microfilm/developer combinations..... (Wed, 3 Mar 1999 07:48:17 -0700)

One of the features that I like about dilute Rodinal, especially with Tech Pan, is the edge effect which is so important for the very small negatives. Does FG7 provide this?

Don

Source: AOL

Re: technidol vs. rodinal in minox tank (Wed, 5 Feb 1997 13:02:24 +0100)

Paul Gandy wrote:

> I usually develop Tech pan in a Minox tank, 3cc to 50cc water. Is Rodinal at 1:60 or

1:100 as good? Thanks. P.Gandy gandype@ctrvax.vanderbilt.edu

Hi, Paul-

I always get confused with "toe" and "shoulder" so I usually try to describe a film as "getting off the ground quickly or slowly." I think this describes a short or long toe. I have found that most "Tech Pan" developers, Technidol included, produce a long toe, or "get off the ground slowly". That means it takes more exposure to get to a density of 0.1, and produces a curve which resembles an "S" rather than a straight line in the shadow area. Technidol seems to produce a less abrupt shoulder at Zone IX, BUT also does not rise as straight at the other end. I like detail in my shadows, and am willing sacrifice a bit of highlight contrast to get the maximum "takeoff climb". BUT, to get the best "fill" at the low end with Rodinal, I MUST add sodium sulfite.

There is a copy of my typical curve at my site

<http://www.slonet.org/~dkrehbie/>

in the "film" section. There is a Hasselblad and 8x10 master in our photo society who has, I believe completely, switched from Technidol to Rodinal for his Tech Pan work. His 6x6cm Tech Pan work is spectacular, being indistinguishable from large format master work.

My guess is that Rodinal 1:60 is too hot! ..unless you have a better way to control contrast than I have found. ..but that doesn't mean much since I am not a great experimenter.

Don

Source: AOL

Re: MPL and B+W (Wed, 5 Feb 1997 21:32:21 +0100)

Joel Moskowitz wrote:

> I noticed MPL is now carrying a slit.

My experience has been very positive. It does a good job on the thin films (Tech Pan, Kodak Royal Gold 25, and Kodak PJM) I have slit. I have had somewhat rough edges with Fuji 800 and Ilford XP2 which are rather thick and tough, but both seem to work OK in the camera. It is certainly straight forward and easy to use. I believe two other members have this slit.

As a result of trying the thicker films, I discovered two types of PLASTIC "pop-top" cassettes which have been distributed with Minox film over the years. The ones from the '70s have a rather narrow film channel WITHOUT felt. The ones I have are prone to binding with the thicker films. I have discovered several of these in which the opening has almost closed at the open end, a condition, which I suspect without confirming evidence, could lead to scratching. I have a picture to illustrate the difference in the "film" section of..

<http://www.slonet.org/~dkrehbie/>

The new ones which came with recent AgfaPan 25 have a wider opening within which a felt light trap is mounted. I am tossing OUT the old ones.

Don

Source: AOL

Re: Pushing Minopan / slit (Wed, 5 Jan 2000 17:44:51 -0800)

Charles Trentelman wrote:

> -- his web site linked via the sub club sponsors section is practically a
> blueprint
> begging to be stolen --

I am happy to say that the design at <http://www.slonet.org/~dkrehbie/2photo/slit/slit.htm> has been adopted by many since first published in 1996. I have never worried about it being "stolen" as the very act of publishing it on the internet is an act of giving. I DO prefer that it not be produced commercially FOR PROFIT without credit and/or compensation, as there IS a copyright statement at the entry of my site <http://www.slonet.org/~dkrehbie>. So, you may use the aforementioned design for your own personal use - "stolen" is only descriptive if manufacture for profit becomes an issue. So just slit film and make great images.

Don

Source: AOL

ASA 400 film (Wed, 5 Mar 1997 13:44:20 +0100)

Godfrey DiGiorgi wrote:

> >2. Has anyone shot with Agfapan 400? How are the results?

>

> Yes. A bit too grainy for my taste. Not particularly useful for

> daylight shooting. In dim situations it works well.

I just got back a roll of Ilford XP2 that I sent to MPL. The prints show no grain! They are a bit soft, but I suspect no fuzzier than any ASA 400 film would be. It is an interesting trade-off. It is well known that grain tends to provide an impression of sharpness, so the lack of it makes the image look soft. But, it is a silky smooth image with LOTS of latitude. Neat Stuff! I scanned a negative of the SLO mission at 2700 ppi, fooled around (sharpened some) with Photoshop and printed a quite nice 6x8 print on the Epson Stylus Color printer. A 72ppi version is in the Minox - Just Cruisin' section of my site. I think it is a very useful film for low light and especially with long range scenes. Of course, you have to slit your own, but it is C-41, so MPL can process it, and I think it was a spectacular job.

--

Don

<http://www.slonet.org/~dkrehbie/>

Source: AOL

Re: ASA 400 film (Wed, 5 Mar 1997 22:47:24 +0100)

Godfrey DiGiorgi wrote:

> Sigh, old age is getting to me.

You gotta be kiddiing! Trust me, you aren't even close. I just downloaded a bunch of Acrobat files from Ilford, and apparently David is correct. The 8 page XP2 data sheet specifies only C-41.

If you haven't seen the Ilford site, it is worth it.

http://www.ilford.com/us_english/homeng.html

Don

Source: AOL

Re: Bessler 23CII (Wed, 7 Oct 1998 19:09:08 -0700)

Frederick Greenspan wrote:

> I appologize for sending my reply public.

No problem, I just didn't want to clutter the list with "non-submini" stuff. Although it was the printing of a Minox negative that caused me to realize how lucky I have been with the B-22XL. I am concerned in that the Bessler takes a 24V-200W bulb and displays EV 14.6 at the negative, while the Omega takes a 30V-80W bulb and delivers EV 16.3. That is a stop and a half less light for 2.5 times the wattage! The Bessler has what is called a "Dual Dichro" head, which appears to be a color head that simply slips over the gutted "condenser" lamphouse. The light is 12 inches above the film, as opposed to 3 on the Omega.

There is a "Conic Light Integrator" for use with smaller film formats, but it appears to be a PAIN to install. I am not willing to take the enlarger apart every time I want to print 35mm or Minox. I guess my question is - Is this an old "temporary fix" color head from Bessler or is this the mainstream Bessler solution? I can see going to a cold light and using #0 and #5 filters like I did with Godfrey's Minox enlarger. This is definitely NOT a good Minox solution, whereas the B-22 surely IS.

I have always sort of had an inferiority complex about not having a Bessler. I guess I am asking if I am missing something.

Don

Source: AOL

Tech Pan "reds" (Wed, 8 Apr 1998 05:59:27 -0700)

Peet -

Tech Pan is quite red sensitive. You will probably not notice it most of the time, BUT portraits are less than flattering, and if you happen to be out around sunrise or sunset, your meter will cause you to overexpose the highlights since they are quite red and Tech Pan LOVES red! At the harbor,

red buoys will print white. It is surprising how many things have a bit of red in them. Long ago I took 2 cameras, one with Tech Pan and the other with AgfaPan, took the same shots, and made small prints. The differences were quite dramatic. Try it! One reason I like Tech Pan.

Don

Source: AOL

Complan "personality" and DOF (Wed, 8 Dec 1999 08:13:44 -0800)

Charles Trentelman wrote:

> -- is it me or does the 3.5 complan in an older model B have a kind of old
> world (ie, soft focus) feel to it?

I think the Complan DOES have "a kind of old world ... feel to it", but certainly NOT soft focus. It has the potential to be the sharpest of the bunch. It has a lovely Bokeh, which I think accounts for the "feel". Unfortunately, Minoxii CAN get out of focus. I suspect the mechanism or lens mount gets disturbed - It happened to my IIIs. Load up some of the finest film you can, tripod the camera (or sandbag it), make exposures at infinity and 12 feet - with the focus properly set of course. You should get as much information as the film can provide.

The DOF thing is another matter. If you do the arithmetic, you will discover a MUCH smaller window - about half the size of that shown on the camera. 6 feet to infinity works for a 4x5 print, 11 feet to infinity for an 8x10, etc. The difference will be most evident with a grain magnifier under the enlarger, so if you are used to 35mm with good enlarger and lens, keep that in mind. The Complan SHOULD be sharper (size for size) than any 35mm lens you have.

Don

Source: AOL

Tech Pan speed (Wed, 9 Jul 1997 10:41:09 -0700)

Al Doyle wrote:

What speed are you rating the Tech Pan?

That's an interesting question. If one uses the method described by

Ansel Adams and later by Fred Picker,

<http://www.slonet.org/~dkrehbie/6asa.htm>

I find that ASA (ISO) 25 gives me a Zone I density of 0.1 above fb+f.

This assumes you are going to participate in Zone System rigor, or "Expose for the shadows, develop for the highlights." It also requires that you are a really good guesser or have a spot meter.

As described in the "f/16 Rule" discussion at -

<http://www.slonet.org/~dkrehbie/4speed.htm>

- when using positive color materials (Kodachrome, etc.), the limited range and disastrous effects of overexposure, cause one to pay attention to the high values and overall color saturation. If the "f/16 Rule" or gray card reading is used, or a camera is used in "automatic" mode, the ASA (ISO) setting needs to be adjusted to provide the desired overall effect and the nominal rating is only a starting point. The setting also depends on the light and subject conditions and adjustments over several stops may be needed.

So, in answer to your question, with MY equipment and development, Tech Pan is ASA 25. In automatic mode, depending on the light and subject, perhaps 50. I have been able to increase the effective speed, but at the expense of overall range.

Don

Source: AOL

Tech Pan speed, more on (Wed, 9 Jul 1997 12:55:20 -0700)

The down side of Minox photography. Yesterday, a cold foggy morning, I walked a half mile down to the beach and there to my astonishment was a half-mile long row of pelicans standing at the water's edge. I'm guessing about the length of the row because it disappeared into the fog. I made several exposures with the Minox as I approached the group. Finally, they decided they didn't need this and flew away.

Now, a pelican AT 60 feet does not satisfy the near/far, large/small condition, so I decided to go back this morning with tripod, and Nikon with 80-200mm lens. No pelicans! But I did some testing with the other birds and ASA settings. In the fog, with the Nikon set on auto exposure, the ASA 50 was still a tad slow. I suspect that a setting of

80 would be about perfect WHEN USING AUTO EXPOSURE MODE. Had I metered the black "belly" feathers on the birds, I would have placed them on Zone III and used ASA 25.

The test is whether there is too much density in the thinnest part of the negative. There is in the ASA 25 frames. The ASA 50 negatives are better, and the ASA 100 negatives have insufficient detail in the thinnest part.

BUT, fog is a lot different than bright sunshine with deep shadows! So what speed is Tech Pan? Kodak and I agree on ASA 25! In your camera AND SITUATION, who knows!

Don

Source: AOL

Negative expansion (Wed, 9 Jul 1997 20:58:06 -0700)

John Brubaker wrote:

> Don, do you carry more than one camera so the development can be tailored for each
> lighting situation?

Not since 1979. That is when AA announced what everyone should have known for years, but didn't. Selenium is the perfect negative intensifier. The process is described in "The Negative" and involves immersing the negative in 1:3 Kodak Rapid Selenium Toner for from 1 to 5 minutes. I can get a little more than N+2 with Tech Pan and will test Copex soon. The real advantage is that there is NO increase in grain! There is absolutely NO alteration of Zone I, so exposure need not be altered. The effect is truly proportional, just like tilting the curve. I develop the entire roll for the negative needing the least expansion and increase the CI with selenium for individual frames that need it. The large format photographers in the area use this technique for localized negative intensification. Ansel would have used it for the foreground of Moonrise, had they discovered it. It turns out to be the biggest gift for roll film users.

Don

Source: AOL

Re: Thin base film (Wed, 9 Jul 1997 21:14:11 -0700)

Allen R Garrard wrote:

> What has been your experience ???

I am still trying to discover the impact of thin film in both the Minox AND the Nikon 35mm FE. I have no confirmation fot the following theory.

- 1) ..why Tech Pan (4 mil) appears to have softer edges than thicker films in my Nikon FE.
- 2) ..why Tech Pan appears softer than Copex (5 mil) in the Minox LX.
- 3) ..why Tech Pan appears to make sharper edges in the IIs than in the LX.

My current theory is that thin film is registered less precisely than thick stiff film in FLAT film gates, and that thin film conforms better in the curved film gate of the early Minoxii.

I have absolutely no proof at this time, but will seriously get at this soon. The differences were first noticed at 50x magnifications and attributed to the sloppy photographer who took them, but a second set of negatives seemed to confirm the results.

I would suspect that 2.5 mil film is too thin for flat film gates, but might be OK in the curved film gates of the Minox A & B models.

Don

Source: AOL

Submini-L:

The Subminiature Photography Mailing List

Personal Reflections & Miscellaneous



Personal Reflections & Miscellaneous

Re: MINOX EC vs Other MINOX cameras (1997-01-12T13:41:17)

Bower, Michael wrote:

>

> a waterhouse stop

I don't know either, I just didn't have the guts to ask.

Don

Source: AOL

Re: Waterhouse Stops (1997-01-12T16:27:49)

Thank you Michael Bower for asking. I can't believe you and I are the only ones who didn't know.

Michael Bower

--

Don

Source: AOL

Re: Light Leaks (1997-02-21T16:57:02)

Mark Langer wrote:

> I will now go and stand in the corner for an hour.

Promise not to do it until all of the rest of us who have done similar things have agreed to also do so.

Don

Source: AOL

Good thought (1997-03-22T22:59:26)

Martin Tai wrote:

> A famous Tang Dynasty painter wrote, that a good painting should stand

> midway between likeness and unlikeness.

I like this! Thank you.

Don

Source: AOL

Re: The SUBMINI-L 100 (1997-04-14T16:32:53)

Thank YOU, Larry

Without you, you wouldn't be able to thank us. I am grateful for all of the good friends found here and the valuable information acquired.

Don

Source: AOL

Kodak 110 projectors (1997-04-18T15:06:26)

I have just returned from our local photo store. Brent mentioned that he a client who wanted to sell two (2) Kodak 110 projectors, with control box (no dissolve) with tape drive. That is about all I (wanted to) know. If you are interested, you can contact Brent directly via e-mail at -

BrMacSM@aol.com

It is 3PM now here and the store is open 'till 6?, so don't expect an answer right away. I haven't the faintest idea of what the set is worth, or what they are asking.

Don

Source: AOL

Re: Greetings Folks! Just a test! (1997-04-20T17:09:10)

James Donald Hewitt wrote:

>

> Just want to see if i have the right address.

You do, Welcome!

Don

Source: AOL

Digital Imaging Reference (1997-05-15T06:30:21)

Digital Light & Color provides digital imaging services. I HAVE NO EXPERIENCE WITH THEM, BUT, their site has some very interesting information.

<http://www.dl-c.com/>

Especially interesting are Adobe Acrobat downloads which answer almost every question you might have about digital images.

1. Take the "Download FREE Software, Documents, and Samples" option
2. ...and download

BASICS.PDF (182Kb) -- The Basics of Digital Images
HIST.PDF (1.08Mb) -- Using Histograms and Curves
RETOUCH.PDF (187Kb) -- Image Retouching Techniques
SCAN.PDF (215Kb) -- Using Scanners
COLORBAL.PDF (139Kb) -- Color Balancing Techniques
SHARPEN.PDF (263Kb) -- Sharpening Images
COLORIZE.PDF (144Kb) -- Colorizing B&W; Photos
MASK.PDF (534Kb) -- Creating and Using Masks

They also have one of the most complete set of links I have seen.

Don

Source: AOL

Rich web-site (1997-05-15T15:29:54)

I have just visited the presentation of Per Volledal at -

<http://home.powertech.no/pervo/>

It is well worth a visit. Per has worked in a variety of media and I,

for one, have a lot to learn. Thanks Per!

That is two new sites from the group today. Anyone else?

Don

Source: AOL

Re: Celebrate!!! (1997-05-28T21:34:24)

It's your baby, Joe and we all thank you!

Don

Source: AOL

Re: Ansel Adams Test, Is Sharpness Your God? (1997-05-31T18:45:34)

Graf, Mike wrote:

>

> Well, if it is art that you strive for, first you must achieve some level
> of craftsmanship in order to formulate your expressions of art. So,
> strive to be a good craftsman to have greater latitude in your artistic
> expression.

>

> And as for the craft of sharpness, there is a good line in 'Lonesome
> Dove'....'Better to have it and not need it, than to need it and not have
> it.'.....Guess that goes for all the craft virtuosity.....

You have expressed it perfectly. Thank you.

Don

Source: AOL

It comes to mind.. (1997-06-21T11:56:45)

The recent static on the list reminded me of a favorite saying of my wise grandmother. "It is better to be thought a fool, than to open your mouth and remove all doubt." I don't have time for this, Goodbye! If there is something IMPORTANT or INTERESTING to discuss regarding photography, please contact me directly.

Thank you Larry for all your effort and good luck with your "environmental" efforts. I have made many friends here and have all of your addresses, so to the individuals who have something to contribute, this is not goodbye.

Don

Source: AOL

Agfa Copex (1997-06-26T07:20:56)

I really did a dumb thing! I renamed a bunch of stuff without even thinking about the "bookmarks" people might have set. NUTS!

I decided to try to build a site structure that had some order. I also got tired of waiting for Netscape and Microsoft to fix "frames" - and of having 2 forms (with and without frames).

The new site address for my Copex experiments is -

<http://www.slonet.org/~dkrehbie/f6tcpx.htm>

Don

Source: AOL

Slide Show? (1997-08-30T14:22:53)

Anyone know how to produce slide shows on a TV, using a computer, scanner, and CD burner, without resorting to Kodak's PhotoCD?

Don

Source: AOL

Re: out of focus Minox pix (1997-10-23T16:02:54)

Egad, Pete, you've done it again! I would have never thought of that and it probably has happened to me. It is another thing to consider. Thanx!

Don

Source: AOL

Re: minox portraits (1997-10-27T09:04:16)

John Brubaker wrote:

> The people you photographed all look like they were enjoying the
> experience.

They probably were. Godfrey is a fun guy and it reflects in his portraits.

Nice work, Godfrey - you certainly have a feel for capturing people at their best.

Don

Source: AOL

Re: Printing Out Paper (1997-11-18T17:57:15)

It's OK, Michael - I remember!

I have just been going through a bunch of stuff from my "darkroom-in-the-closet" days, c. 1935 and you are absolutely correct. In fact I would like to find some POP to introduce photography to my grandkids. It really is a lot of fun and, next to using a Polaroid, is the easiest way to teach photography.

Don

Source: AOL

Re: Happy Anniversary to Us (1997-11-18T18:04:37)

As is true with every technology, airplanes, computing, etc., the early days bring out the best people. I have no idea what the internet will look like years from now, but the Larry Feldmans will have certainly given it the best chance for greatness. Thanks Larry.

Don

Source: AOL

Re: Anniversary photo contest (1997-11-21T19:10:46)

Me too!

John Brubaker wrote:

> I'll 2nd Pete's feelings about the contest. I'm tired of reading all the
> disagreement over rules and arrangements. An exhibit would be just
> fine. - JB.

Don

Source: AOL

Re: The Minox diffuser and printing times (was: Printing Delta (1997-12-15T13:34:16))

Joel Moskowitz wrote:

> What kind of paper are you using? I am using forte fiber polywarmtone
glossy

I think the paper may be the culprit. My times for a 6x8 with the Omega color head and the 28mm Nikkor at approx f/5.6 are in the range of 30-40 sec with Ilford Multigrade FB. I have some Forte and think I remember thinking it was slower a while back. I will have to check it.

Don

Source: AOL

Re: Agfapan uses new tech? (1997-12-17T07:05:45)

I apologize for the last message, it was meant to be private.

Don

Source: AOL

Wishes for a Happy Holiday Season (1997-12-24T14:50:16)

With special thanks to Larry who brought us all together and to Joe who's effort is nearly impossible to comprehend, I wish to take a moment to thank all who have made this a memorable year. It is easy to become jaded about phenomenon of which we are a part. Ask any question and the answer comes from somewhere in the world. Over the past week I have begun to seriously research my family history. I am in awe of the work already done. Without leaving my chair I have two families traced back to the 1600's, met some VERY nice people (relatives of course), and continue to reaffirm that the internet is phenomenon defying description.

Just imagine your reaction to someone trying to describe, in 1990, our experience of the past year. I am especially grateful for the "e-friendships" that have materialized in this international group, and must thank Michael, "e-friend #1", for the introduction.

Thanks for being a great bunch, and all the best for the Holidays and the New Year.

Don

Source: AOL

Re: HC-110 (1998-01-23T21:05:31)

XKAES wrote:

> I agree, but with agitation of 1 minute or longer, aren't you worried about
> bromide streaking?

Actually I read about that problem in AA's book years after I had been doing it this way. I guess sometimes less knowledge is better. the long standing times can produce enhanced edge sharpness due to a bromide edge effect (that has a name

I can never remember - named after Mackie (sp) I think).

Don

Source: AOL

White light on the Minox C (1998-02-19T17:45:57)

For years I have assumed that the little white light on the C had something to do with the position of Jupiter. When pressing the lever, The light illuminates only during the first 24 hours after inserting a new battery. Since I only install new batteries when Jupiter is behind the Moon, I assumed that was the connection. The light does not, at present, go on. I just exposed three rolls and all frames appear to have the expected density. I exposed a series from 1/1000 to 1/15 and the results are as expected. The Elf who came with my Volkswagen told me the white light was a battery check, but that was a long time ago. Is the Jupiter Theory correct, or was the Elf correct, and I have a problem?

Don

Source: AOL

Monitor size (1998-02-23T12:05:50)

I use a 15 inch monitor set at 640 x 480 pixels. I know a number of artists use monitors with higher pixel counts, and that images scaled for 640 x 480 look quite small thereon. Since I have a bias against scrolling around an image, I find having images larger than a single screen size cumbersome, and I tend not to bother looking. This does a disservice to the artist and deprives me of considerable pleasure. My trip to Staples this morning confirmed that all but one of their computers had 14-14 inch monitors, which I presume are either fixed at 640 x 480 or can be set thereto. I notice that most web pages seem to fit my screen without scrolling, so I suspect the smaller size is still fairly standard. It would be interesting to have a sense for the size and frequency of the screen sizes being used by members of the list. If you are inclined to participate in this little "off-the-cuff" survey, please address responses to me directly and I will summarize at the end of the week.

Don

Source: AOL

25mm Enlarger Lens (1998-03-10T11:19:00)

How much should I pay for a Rodenstock OMEGARON 1:4 f=25mm? Anyone with experience therewith?

Don

Source: AOL

Re: Film Slitter manufacturing (1998-03-21T14:54:45)

XKAES wrote:

>

> Why leave out 35mm to 16mm. You could double your profits.

And 16mm to 9.3mm!

Don

Source: AOL

Re: Boy Scout film slitter (1998-03-21T15:02:23)

My apologies to all. I just hit the send button by mistake. First one this year!

Don

Source: AOL

Re: Estimating distance (1998-03-28T07:34:09)

If anyone finds one of these little rangefinders loose - PLEASE let me know.

I had one in the "Argus C2" days and would LOVE to have one again.

Don

Source: AOL

Re: new posting on MPL site (1998-04-10T19:57:59)

I spent the afternoon looking for my binoculars to try again, having had minimal success in the '70s. Thanks Pete for the exhaustive and exceptionally well written article.

Don

Source: AOL

Re: Printers (1998-04-29T16:26:40)

Larry Feldman wrote:

- > I understand that dye
- > sublimation printers, such as the Alps, are now which in an affordable
- > range of \$5/600 (vs inkjets which folks seem to favor).

Several months ago I sent a file to ALPS and they printed it for me with both their color and black "inks". The color print was beautiful and after six days in direct sunlight showed no perceptible fading. The B&W Epson print I tested next to it was beige. Their black only print was of much less quality and I don't to this day know whether they can print black only at the quality of the color prints. Their "ink" is provided by what look like wax impregnated ribbons, and after reading the FAQ at their web-site, I got the impression one could use a lot of them.

Don

Source: AOL

Re: OK, see what this list has done to me! (1998-05-31T21:39:40)

Ben wrote:

> I HOPE EVERYONE ONE THIS LIST IS HAPPY AT WHAT YOU HAVE DONE TO ME :-
>>))

We are! And we'd do it all over again!
I'm glad you like Ray's slitter.

Don

Source: AOL

Re: Malfunctioning Minox C (1998-06-11T06:59:49)

Michael Taglieri wrote:

- > Actually, from the point of redundancy alone, wouldn't it be better to
- > bring along a single 35m system with two bodies?

YES!

Source: AOL

Re: SUBCLUB anniversary (1998-06-21T15:51:08)

Congratulations Joe, the credit is all yours. I doubt that any of us have been through the whole site or have the faintest idea of the work you have put therein. Magnificent job!

I wish you wouldn't mark anniversaries - TWO YEARS? No wonder I ache more.

Don

Source: AOL

Re: Overlapping frames in a B (1998-06-29T21:10:49)

Ben wrote:

>

> I just shot my 3rd roll of my home slit 15 exposure FP-4.

> The first several shots overlapped.

Did you start at the red dot?

Don

Source: AOL

Re: PMK Pyro film developer (1998-07-14T21:17:04)

Joe McGloin wrote:

> And they call this progress? Sounds like the Windows 95 of the photographic

> world!

You got that right!

Don

Source: AOL

Re: Minox Exposure Chart (1998-07-22T06:38:11)

MARTIN TAI wrote:

> Thus 1.4, 2.8, 5.6, 11, 22 is a geometric series with

> exact factor of 2;

Yes, BUT - where does the 1.4 come from? Is it EXACTLY 1.4?

Don

Source: AOL

Re: darkroom requirements (1998-07-22T08:49:11)

Michael Bower wrote:

> Other than having to get a drying cabinet to keep dust off the negatives as they are drying

I worked for years in a basement under the house 4 feet from the dirt and with open vents all around - with the washer and dryer, and big gravity furnace. Never had a dust problem.

DON'T put the enlarger on a table. If possible, mount it to a wall, preferably the plate that is bolted to the foundation. Then build a bracket to hold the top steady to the same wall. I was lucky in that the foundation was about waist high making the enlarger a perfect height. I now have the enlarger mounted in the wall between the studs and supported with an adjustable bracket at the top.

I too no longer have to use the washer and dryer for tables - delightful!

Don

Source: AOL

Re: color to B&W (1998-07-22T20:14:26)

Peter Zimmerman wrote:

> Does HP sell this little Widget?

I don't know. It came "free" with his new HP scanner. Being a rather frugal, I thought I would try to make one. If I fail, I will try to find out.

Don

Source: AOL

Re: darkroom requirements (1998-07-22T20:17:51)

Peter Zimmerman wrote:

> Fluorescent lights are common in laundry rooms.

And remember, fluorescent lights glow for a while after being turned off! At least enough to create havoc with photographic materials.

Don

Source: AOL

Re: Value of "all this square root stuff" (1998-07-24T06:40:34)

Ray Pepalis wrote:

>

> As long as we're discussing Pizzas and Pies. I thought I'd mention that
> someone in the Indiana State Legislature once proposed a bill that would
> round off the value of pi to an even 3.0.

So, what's wrong with that? In the interest of ecology and conservation, it would make circles smaller! Did it pass?

Don

Source: AOL

Extensive Developer Site (1998-07-31T21:28:55)

Just found this PMK Pyro description which led to a lot more photographic information.

<http://www.seanet.com/~jwsmith/pmk.htm>

Source: AOL

Re: Minox developments since Leitz takeover + what is Leitz (1998-08-12T13:03:06)

success rate on other takeovers?

mathison@IX.NETCOM.COM wrote:

> Tiltall should be back into production any day - and improved so you can
> change the center column and use a ball head.

Good!

> > Star D brand was a close copy.

Not close enough! My Tiltall still works perfectly - the Star D is long dead!

Don

Source: AOL

Re: The Minox ECX resolution (1998-08-12T16:57:19)

Karasev, Alexander wrote:

> is "more than 200 mm" all that high?

I have to assume that they think it is better than the old one(s), or wouldn't make an issue of it. The only to tell will be to compare with REAL prints. We shall see!

Don

Source: AOL

Re: Washington Post article (1998-08-15T08:10:45)

Yeah, the article was in our local paper also. Heh, heh!

Source: AOL

Re: Loading Minox Cassettes (1998-08-21T18:38:26)

Welcome to the "club", Rich

One such location is -

<http://www.slonet.org/~dkrehbie/2photo/negative/slitter/slit.htm>

Don

Source: AOL

Re: AL's new sub-group on Yahoo (1998-09-10T17:14:50)

I just tried to sign up for Al's group. Yahoo blocked my entry because I have "Cookies" turned OFF. The idea of these guys storing THEIR advertising junk on MY hard drive, in MY System Folder and Preferences File, sends me into orbit. I don't know if they are otherwise tampering with my computer, but "Cookies" is just too much. Fortunately the new Netscape allows me to turn off Cookies - I used to trash the file every day.

I worried the first time we put a modem on our mainframe so my staff could work at home. That was in the 300 baud days, and we took extraordinary steps to make sure only WE could access the machine. I suspect I will have to get a old, small machine just for the internet - an idea that surfaced when I first contemplated jumping on the internet.

Sorry this is not about subminiature photography except that without the internet, I would not have met any of you.

Don

Source: AOL

Re: expo photos (1998-09-11T18:43:25)

Godfrey DiGiorgi wrote:

> My browser was unable to reach the second URL but the others were great!

It took me three tries to get the third one. something about traffic?

Don

Source: AOL

Re: Minox product line (1998-09-22T19:39:51)

Frank & Terri Snodgrass wrote:

> Lets stop bitching ...

I AGREE!

Don

Source: AOL

The perfect enlarger (1998-12-23T09:46:45)

Mathison wrote:

> I also am still searching for the perfect enlarger.

When you find it, I'd like to be the FIRST to know!

Don

Source: AOL

Re: Happy Holidays (1998-12-23T09:47:20)

Pete said it perfectly. Happy Holidays to all and thanks for the information, advice, and most of all, the friendship.

Don

Source: AOL

Re: real cheap 120 (1999-01-25T21:50:05)

How cheap is REAL cheap?

Don

Source: AOL

Re: "Spy" Cameras? (1999-03-14T22:43:40)

As I recall we had wire recorders during the war. Also I believe the 8th started operating in the summer of '42. I had a friend in the Eagle Squadron who flew Spitfires before getting moving to the AAF and 'Jugs' Wee lost a friend in, I'm pretty sure late summer '42. The early losses were horrific and I can't remember when the "mutiny" surfaced.

Source: AOL

Re: "Spy" Cameras? (1999-03-14T23:02:10)

> As I recall we had wire recorders during the war. ...

NUTS! I apologize for the message to the list, it was intended as a personal note and I forgot to change the address. The war is not the topic here.

Don

Source: AOL

Re: MINOX EC: what a BUST??? (1999-03-18T11:43:10)

OOPS!

Takes a LOT to teach an old crock new things. Too long with a IIIs. I DO have an ECX and have to keep reminding myself. Sorry! Use f/5.6 with your 35mm machinery.

Don

Source: AOL

Which scanner? (1999-04-19T19:41:27)

I am in need of advice about the current crop of scanners. I guess it comes down to whether one likes Agfa, Microtek, or Umax - or does it? I want outstanding results from B&W and excellent from color. Do I need to spend more? This is the list from the current MacWAREHOUSE catalogue. I deleted the more expensive ones. Mistake?

EPSON PERFECTION 636U SCANNER 600X2400 DPI	\$229.95
--	----------

Microtek Slimscan C6 USB Duo Scanner (\$20 rebate)	\$109.95
--	----------

MICROTEK SCANMAKER X6 USB DUO SCANNER 600X1200 \$149.95

AGFA SNAPSCAN 1236S SCANNER FOR PC \$249.95

Epson Perfection 636 Scanner for Mac/PC \$299.95

ScanMaker X6EL Duo Scanner
\$249.95

AGFA SNAPSCAN 1236S SCANNER FOR MAC \$249.95

Umax Astra 1220U Scan 36Bit w/10Bit A/D Convrt USB \$149.95

Thanx

Don

Source: AOL

Photoshop (1999-04-22T08:17:02)

Does anyone know of an "advice" list for Photoshop. I'm so tired of things that don't work, and have surly, inadequate documentation, IBM was notorious in the '60s, a condition they seem to have exported to the rest of the industry. I'm sure this is not a topic for general discussion, my direct line is

dkrehbie@slonet.org

I just keep getting the message "The command "-----" is not currently available" when I try to Batch run an Action

Don

Source: AOL

Photoshop question answered (1999-04-22T16:34:01)

Thanks to all for the help. Jim Deaver hit the nail on the head with the source of my problem. All is now well and I am happy again.

Don

Source: AOL

Re: slitter (single use version???) (1999-04-23T21:54:34)

I don't think anybody's laughing, Bob. Certainly not I. It is just such experiments that lead to great products. Keep it up!

Don

Source: AOL

archival inksets (1999-05-18T22:58:05)

PixelPeet@AOL.COM wrote:

> I just saw archival inksets for Epson photo printers,

Where? Will they stand up to direct sunlight?

Don

Source: AOL

archival inksets (1999-05-19T09:45:11)

PixelPeet@AOL.COM wrote:

> In a message dated 5/19/99 1:32:31 AM, ramarren@BAYAREA.NET writes:

>

> << I'd like to know more about the archival inksets ... :) >>

>

> <http://www.luminos.com/>

>

> looks good!

>

> Pete

When I first heard about the Luminos inks and papers, I called and talked to one of their people. Having run fade tests since the original Stylus Color printer, I asked if their new stuff would withstand five, 6-hour days in direct sunlight, and got what I considered an answer that did not fill me with confidence. Someone might press the issue. Although it is not likely that any artwork, not intended for outside

display, will have to withstand extended sunlight, afternoon sun streaming through a window can be a problem. The only prints to pass my "five 6-hour days" test were those samples sent me by ALPS. My "control" prints with Epson ink were badly degraded, while the ALPS prints showed no apparent change.

It is also noteworthy that the paper is critical. I have identical prints made on different papers which after three years display appear quite different.

Don

Source: AOL

Making Digital Negatives for Contact Printing (1999-05-31T08:18:21)

New references for those interested in "Making Digital Negatives for Contact Printing" by Dan Burkholder.

A quote from Brooks Jensen's Forward to "Making Digital Negatives for Contact Printing" by Dan Burkholder, should set the stage:

"This book is a beginning of historic proportions. At least, a number of us think so. I believe this information is the most important technique guide since the Ansel Adams books taught so many of us how to make better black & white prints. Not bad company."

<http://www.slonet.org/~dkrehbie/2photo/digital/outneg/outneg.htm>

Don

Source: AOL

Re: B+W Viewing filter question... (1999-07-25T16:06:59)

> \$60.00 each, I have not been tempted.

Neither would I. As I recall the 50mm x 50mm No. 90 Kodak Wratten gelatin filter, CAT 149 6728 was less than \$10 in the early '80s. I have a 75mm x 75mm 80A Wratten gelatin filter with a price tag, from the same era, of \$11.50. Undoubtedly more now, but I'll bet an old photo shop has one lying around in the "junk" drawer.

I have long since learned that, for me, a B&W image that doesn't look good through a Wratten 90 will NOT look good as a print. A somewhat similar effect can be had with a RED filter, but the Wratten 90 is less dramatic.

Don

Source: AOL

Re: B+W Viewing filter question... (1999-07-25T16:18:26)

I just looked at the 1998 Calumet Catalogue (the last one I have). They show Zone VI B&W Viewing Filters (Wratten #90) in a 3 inch circular black frame and either 35mm, 6x6, or 4x5 formats. \$29.95 each

Source: AOL

Re: Ansel Adams biography question..... (1999-07-28T21:20:06)

James,

Mary Alinder, his assistant during the last years, has written a "warts and all" bio which is exhaustive. Ansel was unique and Mary captures this with honesty and style.

Don

Source: AOL

Re: Ansel Adams biography question..... (1999-07-29T21:03:45)

Bob Christopher wrote:

> BTW she had nothing good to say about "The Master" either.

I hope I did not give the impression that Mary Alinder 'had nothing good to say about "The Master"' - QUITE THE CONTRARY. Whether you like his work and the "Zone System" or not, his contribution was enormous - and not just in the field of photography. Mary Alinder's biography was a book that probably only she could write. She was present during the last years of his work, his workshops, and of his life, active in the Carmel photography circle, and the Friends of Photography. I saw her biography as a tribute. It certainly illuminated a very complex and fascinating

life. She has LOTS of good to say!

Don

Source: AOL

Re: Ansel Adams biography question..... (1999-07-30T19:08:36)

Peter Zimmerman wrote:

> I'm not going to chase downstairs to get my copy of the autobiography, Don,
> but I seem to remember she cooperated with Ansel in writing that too.

Yes. In HER bio she describes having to keep after him to work on the autobiography.

Don

Source: AOL

Re: Ansel Adams biography question..... (1999-07-31T07:38:23)

Michael Taglieri wrote:

> I have a first-edition of Yosemite and the Range of Light
> Does anyone know whether the book might have appreciated since
> then?Michael -

Michael -

Mary and Jim Alinder are probably as good a source as any. Their Gallery has a website at -

<http://www.alindergallery.com/home.html>

Source: AOL

Re: Ansel Adams biography question..... (1999-07-31T10:30:21)

Roger Beamon wrote:

> Only met Jim, but he was a very savvy guy.

He should be - he was Director of The Friends of Photography, having a good deal to do with its success in the heady days of the '70s and early '80s. He, and Mary helped with the AA Workshops while Mary managed Maggie Weston's Gallery in Carmel, before going full time with AA. They aren't new to the business.

Don

Source: AOL

Re: Digital Storage (1999-08-15T13:26:02)

Kenneth Trettin wrote:

> ... it is still very difficult to match a good silver print.

But remember, the silver print can be the offspring of digital file. My best prints are now coming from 6x8, 8x10 and 11x14 negatives made either on an Epson ink jet printer or Agfa imagesetter. No contest!

Don

Source: AOL

Re: Photoshop LE Versions? (1999-08-19T18:25:51)

The Photoshop LE 3.0.5 that just came with my new printer does not have layers, or history, or actions, or channels. It would be a great improvement if layers and channels were included in the new version.

Don

Source: AOL

Re: Film thickness list (1999-08-31T15:15:39)

Gary Sehne wrote:

> or maybe they offer it in 2 thicknesses, like Copex?(3.5 & 5mil)

They do.

Source: AOL

Re: Semi-O.T., but Photo (1999-10-14T11:58:03)

Glad to see Paul Strand get much deserved credit.

Source: AOL

Re: Correction on Ambush -- But it gets worse (1999-11-28T10:19:17)

"Peter D. Zimmerman" wrote:

> Maybe editing it to get rid of my name would have been too tough.

Not really. He changed all of the links in my stuff to eliminate any reference to the original source. It just emphasizes the fact that there is NO protection for intellectual property any more. It just takes a few "Save As" clicks and a few "Save Image As" clicks, a bit of HTML work and an upload to the server to steal ANYTHING on the internet. It is important to realize that anything that is published is universally available AND without credit to the originator.

It is important to me to help others and I really don't give a hoot whether it gets stolen, even assumed some of it would be. It is just sad that there are those who must achieve their own ends on the shoulders of others without acknowledgment of the help.

Don

Source: AOL

Re: The Spy Site Responds (1999-11-28T19:48:33)

I think we can put this discussion aside for a while. I just received a VERY apologetic response from Grant Haber, of American Innovations. As noted, he was unaware of MPL and the pricing structure with which we are familiar. He indicated that his website was the work of others who will undoubtedly hear from him tomorrow. I accepted his apology and agreed to let him include a link to my site. I also gave him the address of MPL and suggested that he contact Don Thayer. At this point I have to believe he is trying to do a good job and is caught as many of us have been with too much to do, too little time, and the inability to get competent help with integrity. I will try to find out who did his site work.

Don

Source: AOL

Re: Copyright Ambush (1999-11-29T21:22:44)

I am pleased to report that Grant Haber of American Innovations, Inc. has been very cooperative and removed my material from the spysite.com site. He was VERY apologetic. He also indicated that the prices at his site WERE incorrect and is making corrections. So, actually, we helped him get his site in order. Incident closed. Thanks, y'all for the help!

Don

Source: AOL

Re: Slitter blades (was Camera abuse) (1999-12-12T13:02:11)

Michael Bower - N4NMR wrote:

> Don, have you ever tried or thought about using this green cutting board
> material that you can find now in sewing stores.

YES, I have thought about it, and NO, I have not mustered the energy to get some and try it. How about some of you young guys? It is amazing how one tends to "ossify" after 70. Most of my contemporaries are using all of their available energy and tolerance for frustration trying to get workable digital negatives for contact printing, and mastering the use of "quadtone" inks for direct digital printing. Actually, I find it rarely necessary to change the mat board, less than I originally thought, and I always have scraps from mounting - which are also necessary for the mat cutter.

Don

Source: AOL

Re: Spysite and My Pics (1999-12-26T21:04:02)

Will Whitaker wrote:

> And everybody on the list has been telling me the 400 speed stuff is no good!

Not EVERYBODY! Bite your tongue.

Don

Source: AOL

Phenidone vs. Metol (Fri, 4 Jul 1997 13:34:33 -0700)

Anyone failiar with the difference between Phenidone and Metol?

Don

Source: AOL

Re: The Gallery (Mon, 3 Feb 1997 08:46:42 +0100)

Godfrey DiGiorgi wrote:

>

> I'd suggest cycling the pictures in the Gallery. Put a date on them
> so we know when they'll be up and when taken down. Rather than doing
> a judgement, this way everyone gets to have their pictures put up for
> the world to see, people who log in get a chance to see what everyones
> doing, and the Gallery becomes a living, changing thing.

>

> godfrey

I agree. Jurying is a dangerous business, especially with artists.

Don

Source: AOL

Re: The Gallery (Mon, 3 Feb 1997 08:53:36 +0100)

Oops. One other thought. There is nothing wrong with restricting each member to one print per month (or every other month, or whatever interval the gallery can accommodate). Forcing a decision about which image to exhibit can lead to all sorts of good things. In effect, the artist is "jurying" his/her own show.

Don

Source: AOL

Re: Stanley Kubrick, Hail and Farewell... (Mon, 8 Mar 1999 08:12:53 -0700)

Brilliant, Michael! You are a magnificent writer, and besides that, I heartily agree.

Source: AOL

Re: Defining who we are (Mon, 9 Jun 1997 20:23:36 -0700)

Andrew Kehoe wrote:

>

> How about "The circle of confusion"?

I'll vote for that! Good show, Andrew

Don

Source: AOL

Re: All mixed up (Sat, 1 Jan 2000 11:21:48 -0800)

Mike -

My site won't help you a BIT! Godfrey and others are the experts in this arena.

Don

Source: AOL

Re: Minox longevity (Sat, 4 Dec 1999 07:39:50 -0800)

Of course Godfrey can answer this, but he doesn't remember when it was less than ten seconds. Mean Time Between Failure. The time you had to compute before the search began for the blown tube, resistor, or capacitor. Some really profound computing was done on these early machines.

Don

Source: AOL

Re: : Discontinued: Kodak Royal Gold 25 (Ektar 25) (Sat, 5 Sep 1998 11:21:32 -0700)

Al Doyle wrote:

> What you own aren't original negatives, but Release Positives.

GOOD POINT! You are absolutely correct!

Don

Source: AOL

29th Japan Minox Club photo exhibition (Sat, 6 Mar 1999 08:24:16 -0700)

Eiki,

I'll bet there is some marvelous work shown. How can we get to see some of it?

Don

Source: AOL

Re: DUSTOFF (Sat, 7 Feb 1998 19:09:43 -0700)

I also have a "a nice chrome, three clasp, trigger mechanism" - and a couple of refills that don't fit anything. I have recently been buying 3-packs at Costco for less than the cost of the old refills. If you live long enough, all of the old good stuff will disappear. Didn't we used to get the Winter Olympics LIVE!

Don

Source: AOL

Re: Bresson (Sat, 8 Jan 2000 16:34:59 -0800)

Please explain the expression "feet of clay." I don't understand its application here.

Don

Source: AOL

Superior image quality! (Sun, 5 Sep 1999 16:37:44 -0800)

WOW! Anyone doubting the effectiveness of TMax 100 and D76 should visit Dennis Hallgren's site, download the picture of Joakim and Daniel, open it in Photoshop, enlarge it to 100% and gaze with amazement. Great job! The smooth tonality, detail, and clarity are usually associated with much larger formats. And it is a delightful picture to boot. Again we see an example illustrating the fact that we rarely take full advantage of this fine instrument and the materials available.

Don

Source: AOL

Re: Age Survey Results (Sun, 7 Mar 1999 09:57:57 -0700)

>... and the oldest was 71.

Don't I wish! But I must thank you for the 2 extra years! I was already three years old when the Graf Zeppelin flew over the house on its 'round the world trip in 1929.

Don

Source: AOL

Re: A simple solution to Enlarger bulbs.... (Sun, 7 Mar 1999 13:10:37 -0700)

Godfrey DiGiorgi wrote:

> Not perfect by any means, but it suffices.

So if the prints are not negatively impacted by the enlarger, why not perfect?
Is this a photographic Concours d'Elegance?

Don

Source: AOL

Re: Age Survey Results (Sun, 7 Mar 1999 13:17:13 -0700)

Stanley,

I will happily pass the crown and retreat into the mass of youngsters.

Don

Source: AOL

Very low cloud? (Sun, 7 Nov 1999 09:33:01 -0800)

VERY peculiar cloud (?) in Yosemite

<http://yosemite.org/vryos/index.htm>

Don

Source: AOL

Re: Very low cloud? (Sun, 7 Nov 1999 10:54:42 -0800)

I've been watching this since dawn and my old firefighting cells are telling me that we have a fire in the back country.

Godfrey DiGiorgi wrote:

> >VERY peculiar cloud (?) in Yosemite
> > <<http://yosemite.org/vryos/index.htm>>
>
> Yup. I wonder if the aliens are landing today... ;)
>
> Godfrey

Don

Source: AOL

Re: H&W film developer (Sun, 9 Aug 1998 07:57:52 -0700)

Per Volledal wrote:

> I cannot make 1.1 g of Phenidone dissolve in 40 ml of water, no matter how hot.
?????

I am NOT a chemist, and have not yet tried to mix H&W (am planning to this week), but it seems to me strange that the formula calls for mixing in 40ml of hot water - THEN adding to make 120ml - THEN adding MORE sodium sulfite - THEN adding water. Why not start with 100ml or so? I can understand that the sodium carbonate might not dissolve if there is too much sodium sulfite initially, but I do not understand the 40ml starting volume. Any chemists out there?

Don

Source: AOL

Re: List Server problems (Sun, 9 Mar 1997 08:11:34 +0100)

Joe McGloin wrote:

>

> We seem to be having some problems with the list for the last several hours.

> Some people have been getting little or no mail. Another problem is getting

> returned error messages when you send a message to the list.

I'm not sure the LIST is having problems. There are a limited number of contributors and if we all get busy at the same time, the list gets very quiet. I have noticed this on the model airplane list where, even with nearly 500 members, weekends get very quiet (flying, not talking). The only returned mail I have had was the episode earlier this week.

Don

Source: AOL

Re: Test Post (Sun, 9 Mar 1997 13:09:34 +0100)

Larry Feldman wrote:

>

> This test post was made at 3:05pm Sunday.

>

> Larry

This response was made at 12:06am Sunday (3 hours before the original)

--

Don

Source: AOL

Re: Test Post (Sun, 9 Mar 1997 13:19:40 +0100)

I am really sorry to use up natures resources for such trivia BUT I have always wondered how e-mail gets time-stamped. When I look at my log, Larry's message is dated at 9:10 PM and mine at 1:09 PM. I understand MY time since I never changed my internal clock when daylight savings time wend off, but 9:10 PM!

Some dates in my log show a date and some don't. Does anyone understand all of this? ...and why the date header on Larry's message is 15:10:53-(0500). I do understand Universal Standard Time, but REALLY!?

Don

Source: AOL

Re: 8x11 to presentation enlargements (Thu, 2 Jan 1997 09:33:31 +0100)

Godfrey DiGiorgi wrote:

> The enlarger's ready, I need a timer though.

Ansel Adams used a metronome (he already had one on the piano) and counted. I don't remember whether he had a foot-switch or not. I have used a "Lux minute minder" kitchen timer (from the hardware store) for years. It beats 2 times per second and there is already one in the kitchen. A full twist is an hour and that is about all I can stand at a time anyway. My Omega timer went dead after about a year in the '70s and after two unsuccessful trips to get it fixed, is now used for an on-off switch.

Don

Source: AOL

Re: LX/TLX question (Thu, 5 Mar 1998 12:42:18 -0700)

Michael Goldfarb wrote:

> but it is reportedly hard to set.

Mine sure is! I MUCH prefer the C

Don

Source: AOL

Re: ASA 400 Film (Thu, 6 Mar 1997 22:21:30 +0100)

Jim Langmesser wrote:

>

- > ...Fred Picker ... said something like
- > it was difficult with 35 mm to get a true black when printing with on a
- > No. 2 contrast paper

Fred said a lot of useful things, and I would not minimize his contribution, BUT on this, according to my experience, he was wrong.

Don

Source: AOL

Re: awful quiet out dere... (Thu, 9 Jul 1998 19:02:28 -0700)

Godfrey DiGiorgi wrote:

- >
- > just wondering if the mail server is down.

I guess not. I was wondering.

Don

Source: AOL

Re: Re article (Tue, 4 Mar 1997 10:35:15 +0100)

- > Not to get all
- > mystical, but I suppose each must find their own path to
- > enlightenment...

Perhaps the path to California is still "around the horn". The first thing I did this morning was clear my cache. Then I loaded Internet Explorer. I still don't see Pete's article. Is it only available on the east coast?

--

Don

Source: AOL

Re: Don's difficulty (Tue, 4 Mar 1997 14:10:41 +0100)

Joe McGloin wrote:

>

> I'm having the same problem. I'm just hoping it goes away.

The interesting thing is that the returned mail is from a person I know, just the wrong (but reasonable) address. I wonder if he was trying to send me mail and it somehow got stuck in the wrong place. My returned mail is from a gentleman named Cardona, who is a fine commercial photographer in Singapore and will hopefully join the group. I hope this is not the same mail returned to you all.

--

Don

Source: AOL

Re: Don's difficulty finding article (Tue, 4 Mar 1997 14:14:28 +0100)

David Josephson wrote:

>

You might be able to trick

> your way past that problem by calling up <http://207.201.161.104/peterd.htm>

> and thus bypassing your server's domain lookup.

That worked! I got directly to Pete's article. Does the server have a cache? I cant imagine them saving everywhere I have gone. That's scarey! I'll check with them. But it will be slo.

Don

Source: AOL

Re: Suggestions for 1st Minox Purchase? (Tue, 6 Jul 1999 21:01:21 -0800)

Oh, Tim,

I almost forgot. If you want T and B for time exposures, like fireworks or special night effects, the IIIs or B must be the choice. I made many night images in Germany in the '50s with a III and a lamppost.

I hope I didn't give the impression I didn't like the IIIs or Porsche 356, I LOVED them - THEN - I'm just too old to like stick shifts anymore.

Don

Source: AOL

Re: Kodak chromogenic B&W film for minilabs (Wed, 1 Sep 1999 14:40:08 - 0800)

Pete,

Do you think is is (BETTER), (WORSE), (SAME), (None of the Above), when compared to T400CN? I was led to understand it was the "amateur" version of the "pro" T400CN.

Don

Source: AOL

Re: The Future of MPL (formerly submini.com) (Wed, 7 Jul 1999 07:27:18 - 0800)

Does ANYONE know that this is TRUE?

Vicken Berjikian wrote:

> And further, now that I read that the reason MPL is not offering the used
> cassettes is because they purchased a machine from China that cracks open the
> cassette, all arguments about the "economics" and "labor invested per hour"
> is rendered immaterial and purely academic.

Don

Source: AOL

Re: Flash for ...? (Wed, 9 Jul 1997 10:52:25 -0700)

> ...but think how much better it could have been...

So, what doesn't fit that category?

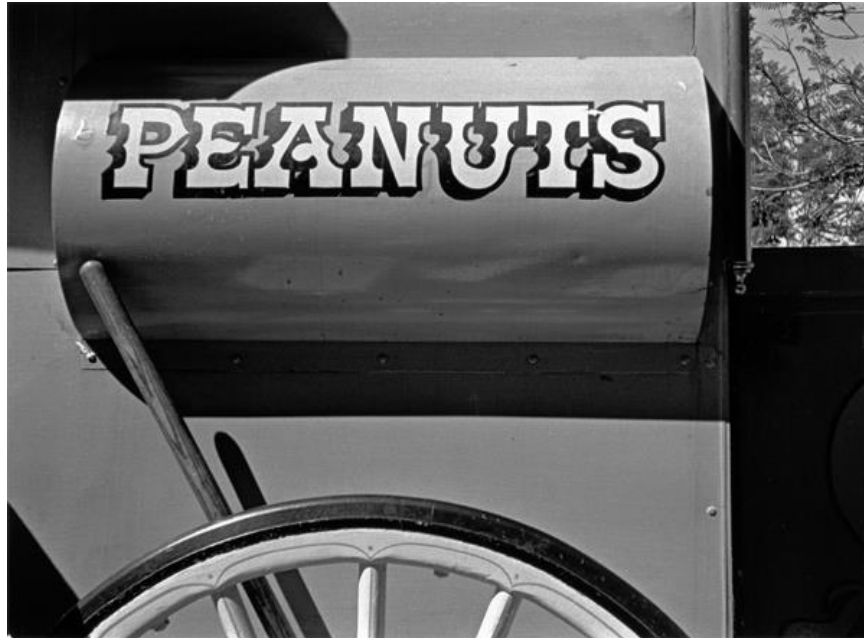
Don

Source: AOL

Submini-L:

The Subminiature Photography Mailing List

Camera Equipment & Handling



Camera Equipment and Handling

Re: pro & con; the Minox enlarger (1997-01-19T22:20:20)

I'm listening, or reading, with interest. Somewhere I remember that longer than "normal" enlarger lenses provided better light distribution, and lenses designed to cover larger negatives minimize "edge" problems. Using a 4 x 5 enlarger for 35mm is supposed to be the good? Put more simply, for equal lens quality, when enlarging a Minox negative, shouldn't a 28mm lens designed for a 35mm negative provide better image quality than a 15mm lens designed for a Minox negative?

--

Don

Source: AOL

Re: Tripod (1997-01-27T16:03:32)

Peter Zimmerman wrote:

- 1) it is very expensive nowadays, even used and
- 2) it is quite long, which means that it doesn't fit a jacket pocket

AND --- If you don't make sure the pieces are securely attached, you may have only part of a Minox tripod. My inner leg and cable release disappeared last week. I was SICK! Two days later I found them under the seat of the car. A bipod doesn't work as well as a tripod! So check your tripods. Tighten all those loose parts before you leave the house!

Don

Source: AOL

Re: previsualizing pictures (1997-02-20T09:23:27)

Interesting subject. I like the IIIs because I don't have to fire the shutter when advancing back to the red dot after a short roll.

I carry, in my card case, a Wratten 90 filter mounted in a Gepe mount. Not good for color, but essential, for me, for B&W.

Don

Source: AOL

Re: previsualizing pictures (1997-02-20T09:59:16)

Sorry to be so cryptic!

The Kodak No. 90 Wratten gelatin filter (CAT 149 4871) is an amber filter that minimizes the impact of color and allows for better evaluation of gray values in B&W photography. It helps when looking for what will be gray values in the B&W print to prevent "mergers". I first saw reference to it in Ansel Adams' book and have only found them at the Ansel Adams Gallery in Yosemite. I should say HAD found them. Since Ansel's death, the gallery has turned into more of a tourist attraction than working photographer's source. Zone VI (now Calumet) sells (sold) a version made with a lanyard for hanging around the neck, and Fred Picker extolled its virtue. I have a lot of trouble assessing the final value of various colored objects (sky and gray buildings, etc.), so this helps and gives some clues as to what filtration might help.

I use a standard 35mm Gepe slide mount (with anti-Newton glass). It is easy to mask for the shape of the negative in use, and I have put masking tape over part to simulate the 6x6cm shape when using the Rollei. The only "gotcha" is knowing how far away to hold it to simulate the image your current lens will cover.

Don

Source: AOL

Re: viewfinder for: previsualizing pictures (1997-02-20T19:41:35)

Peter Zimmerman wrote:

> PS the meter itself, if it works, is pretty valuable and awfully fragile!

What is valuable and what does "if it works" mean? I have a "mint" meter with a "mint" case that I have had in a drawer since I bought it used in a store in the "gold country" in the '60s. It "works" BUT it reads about a stop low.

Don

Source: AOL

Minox cases (1997-03-12T08:56:25)

Speaking of chains (and cases), I wish to thank the gifted member who suggested knife belt cases. Isn't it awful when you don't get public credit for great ideas, but I can't remember who suggested this (Michael?). I went to the knife store and bought two nylon belt cases, one EXACTLY the correct size for the IIIs, and another EXACTLY the correct size for the C. The camera is held vertically and a squeeze on the bottom pops the camera up and out without opening it. Thank you!

Don

Source: AOL

Re: Minox models (1997-03-18T13:16:50)

Peter Zimmerman wrote:

>According
> to Kasemeier all C models have the flat field lens

Heckmann has a complete list showing "Complan" C models from '69 - '70.

Don

Source: AOL

Pentax 110 SLR (1997-03-20T11:52:06)

I just saw a fitted case with a Pentax 110 SLR, a gazillion filters, motor drive, lenses, 2x teleconverter, indeed everything but Mr. Pentax. It looked new (at least like new). It looks like it was purchased as a complete kit. How much should something like that be worth?

Don

Source: AOL

Re: Minox IIIs (1997-04-20T12:01:45)

August DeBarbarius wrote:

> I just purchased a Minox IIIs, serial number 91 xxx. The back is marked III;

> are all IIIs just marked III?

The new book "MINOX, Variations in 8x11" by Hubert E. Heckmann, lists all of the models and specifies the variations in engraving. For each iteration of the IIIs, he indicates the engraving as III, some with Wetzlar, some without. For the "A" models (with metric distance scale) the engraving "III" is omitted. I see no ENGRAVED identification to distinguish an unsynchronized (flash) from a synchronized Model A (III). If you have a flash synch socket on the end, you have a IIIs. Your serial number indicates it was born in 1956. The models are pictured at -

<http://www.minoxlab.com/which.htm>

and

<http://www.platypuscamera.com/minox/>

Don

Source: AOL

Re: Old Minox cassette (1997-04-24T19:13:45)

Peter Zimmerman wrote:

> the light traps (of the old Minox cassettes) are very good dust traps.

OOPS! The new cassettes again have felt light traps. Are we going to have scratching problems again?

Don

Source: AOL

Re: Disinformation (1997-05-24T21:03:53)

Nothing wrong there. The picture is encrypted so you won't recognize it as a Minox. The key is to stand upside-down inside your monitor. The historical lapse is due to the classification of documents written about German products during and immediately after the war. Just remember the CIA is standing guard over your country and mine, and providing information upon which sensitive decisions are made daily.

Don

Source: AOL

Re: Minox Depth of Field, The Ansel Adams Test (1997-05-27T15:13:56)

I must respond to several interlocked topics which are all masquerading under the above title

Be careful how you characterize the members of Group f/64

<http://www.slonet.org/~dkrehbie/d1f64.htm>

If you are using an 8x11mm f/3.5 Minox, you ARE a member!

<http://www.slonet.org/~dkrehbie/d5foc.htm>

Art has forever been flavored with "NEW" movements, largely in reaction to an establishment. The formation of Group f/64 made a valid contribution to photography and was shared by a significant number of fine photographers. I don't believe, for a minute, that any of the members discounted Stieglitz, and Ansel Adams' letter to Alvin Langdon Coburn should be required reading for any student of photography. The fact is that the members of Group f/64 were interested FIRST in the image and, respected GOOD photography, regardless of style. Stieglitz' Camera Work

<http://www.slonet.org/~dkrehbie/d1camwk.htm>

comes to mind as a source for inspiration.

I did read, with interest, the article(s) on Bokeh and could not shake the thought that there is nothing new under the sun. I suspect that the best examples of the use of softness and lens personality are to be found in Camera Work, and the images of Stieglitz, Coburn, Steichen, etc.

I did catch the comment about finding Ansel Adams, tripod holes. I have found a number of them in and around Yosemite. They are not hard to find if one is looking for the best location for a particular visualization, and a number of them were known to the many fine photographers who have trod the valley since its discovery. The problem is that few, if any, are useful today. The tree growth has made most impossible, and meadow "restoration" prohibits getting to others, while the river keeps changing course

<http://www.slonet.org/~dkrehbie/myc.html>

Many of us who photographed there in the '30s and '40s found the same

locations, in many cases rather narrowly defined by trees or river banks. What most of us didn't do was match his vision and skill, ESPECIALLY PRINTING! It took me a long time before I realized that AA photographed clouds - with Yosemite and the Sierras in the foreground. A remarkable multi-talented man with a knack for teaching.

At one time I wondered what lenses might be most useful in the Sierras and did a quick survey of those use by AA for some of his memorable images

<http://www.slonet.org/~dkrehbie/msize.htm>

It is interesting that the range is not particularly wide.

The Minox was designed to be available when other cameras weren't. Even in Yosemite, which is NOT "Minox Country", it can be rewarding to have a Minox "on the belt".

<http://www.slonet.org/~dkrehbie/dkspeed.htm>

The irritating thing about the Vernal Falls image is that I have subsequently tried 35mm and 6x6cm without success. It IS nice to have a Minox!

Don

Source: AOL

Re: Agfa Copex (1997-06-27T06:39:26)

Martin Tai wrote:

- > To test the limit is one thing, to give public illusion that
- > Minox can produce as good a large prints as 35mm or larger format
- > is misleading.

Where have I EVER said THAT?

Don

Source: AOL

value (1997-08-28T07:48:32)

Anyone have an idea what a Minox C and a Rolf Kasemeyer Small minox BIG PICTURE are worth these days.

Don

Source: AOL

Re: Out of focus Minox (1997-10-23T17:50:26)

Peter Zimmerman wrote:

> I do have to check the C and LX.).

My LX is so tight that I often have to tug on it to get the shutter to fire, so there is no chance of having it loose. I recently had it serviced so perhaps that is it.

Don

Source: AOL

Re: Minox equiv focal length (1997-10-28T11:31:53)

> Where did the 43mm lens on 35mm format figure come from?

A little work years ago with my "handy-dandy" spreadsheet produced the chart at -

<http://www.minoxlab.com/dk051597/dknorm.htm>

The 50mm as a "normal" lens for 35mm is, of course, a myth. It is also impossible to compare focal lengths unless one establishes a common "cropping" size, such as 4x5. Diagonals don't work when trying to compare a 6x6 with 35mm.

Don

Source: AOL

Re: Minox LX Problem (1997-11-25T09:17:19)

Try moving around to various light levels (indoors and out) with different ASA settings and shutter speed settings (including AUTO) and listen to the shutter. For example if you have a situation where the exposure should be 1/30 second, you should be able to hear the shutter delay. Try it in manual (1/30) and in auto (A). I think you will be able to tell whether the shutter is fast or slow and make some guesses as to whether there is a problem. Pete is correct (as usual) in his observation about having the speed dial between settings and the "2000" is indeed next to the "A". I always wiggle the speed dial a bit to make sure it is seated in the "detent".

The other problem I have had, although mostly with the C, is a low battery. I have no idea what symptom the LX would show, but it is worth checking the green "battery check light". The electronic shutter in the LX should be fairly stable and anyway the results you are getting are just contrary to what I would expect from a mechanical malfunction. Keep us posted since, if it happens to you, it WILL eventually happen to us!

Don

Source: AOL

Re: Best Submini ever made? (1997-12-31T18:51:12)

Minox IIIs for all of the reasons so eloquently described by Mark James. I was lucky enough to find a good used LX years ago when they were around \$300 new, and it is the most useful in a wide variety of situations (like my Taurus). BUT the IIIs is like my 1954 Volkswagen - a masterpiece of design and engineering - exactly right - always works - a pleasure to use. Classy!

Don

Source: AOL

Re: Minox cassettes (1998-01-20T08:35:41)

Mike -

The new "snap-cap" plastic cassettes are much easier to use since they do not need tape. I also don't know how the metal ones will work in the newer cameras (Pete probably

will). The only thing you must watch for is the changes in design over the years and the NON interchangeability of parts. I have a couple of illustrations at -

<http://www.slonet.org/~dkrehbie/2photo/negative/slitter/slit.htm>

Don

Source: AOL

Re: 11X16 (AA quote) (1998-01-20T20:46:41)

Peter Zimmerman wrote:

> Beautifully said, Al. But as Ansel wrote (approximately), there is nothing so
> dull as a sharp picture of a fuzzy idea. The image has to be worth the effort.

"I believe there is nothing more disturbing than a sharp image of a fuzzy concept!" (Ansel Adams, p.73, The Camera.)

My favorite photographic admonition.

Don

Source: AOL

Re: 11X16 (1998-01-21T08:49:42)

"I believe there is nothing more disturbing than a sharp image of a fuzzy concept!" (Ansel Adams, p.73, The Camera.)

> it can be awfully easy to wax lyrical about a photograph if you usually
> set up a
> tripod to make an exposure, and all your wallet size prints are
> REDUCTIONS.

What does "concept" have to do with negative size? Some of my favorite "concepts" were expressed by Alvin Langdon Coburn, Stieglitz, and Paul Strand (all technically within the capability of the Minox to record) .

Let's not confuse TECHNICAL QUALITY with AESTHETIC EXPRESSION. Both are desirable, but forced to choose, the latter is more important to ME than the former.

Don

Source: AOL

Re: 11X16 (1998-01-21T16:46:06)

Pete-

Two of my favorites are -

John Brubaker <http://www.novagate.com/~photoman/>

Godfrey DiGiorgi <http://www.bayarea.net/~ramarren/>

There are surely many fine photographers in the world making fine images with small cameras. I would love to know what members of the German Minox Club are doing, and especially what is going on in Japan.

Don

Source: AOL

Re: Minox name (1998-01-30T15:40:26)

Peter Zimmerman wrote:

> I know that camera lenses don't in general make good enlarging lenses
> However, with an 8x11 neg you are only using the very most central
> part of the field, and it's not a bad stop-gap solution..

Pete -

I just have to jump on you for the phrase "stop-gap solution". I guess I'll have to get a Minox enlarger to see if it really makes sharper 16 x 20 prints than my 28mm Nikkor camera lens. Just how sharp does the grain have to be in the corners? Mine looks pretty good, even with an 8x loupe. The enlargements shown at -

<http://www.slonet.org/~dkrehbie/minox/m1a.htm>

were made with the 28mm Nikkor, the 14x from a small print, but the 120x was scanned from a 16x20 inch print. Although the Kiaora is in the center, the corners are also sharp.

The other nice thing about using a camera lens is the ease (and accuracy) of

focussing.

Don

Source: AOL

Re: Enlargers used for enlarging Minox, 110, 16mm, (1998-02-11T15:10:57)

35mm (was: Minox enlargements)

> - Your enlarger brand / model:

Omega B-22XL - mounted to the wall AND supported at the top!

<http://www.slonet.org/~dkrehbie/2photo/print/enlarg.htm>

> - Enlarger's max negative format:

6x6cm

> - Negative carrier format brand / model / description if custom made:

Omega Glassless Rapid Shift Negative Carrier (6x6 #423-120, 35mm full frame #423-117, Minox #423-115)

> - Enlarger's fitness for the purpose, pro's, con's:

PERFECT! The true joy is having a color head for diffuse light, optimized tonal range, and variable contrast with VC paper. Using the same enlarger for all formats permits standardization of procedures. 16x20 prints from Minox negatives easy with a 28mm lens.

Don

Source: AOL

enlarger light bulbs (1998-02-11T20:50:35)

We had a lively discussion about Minox enlarger bulbs, but where do I get 80W ELB bulbs for my Omega. My friend at our local store said he would order me one FOR \$30. AWK! Do I recall someone had a reference for a speciality store?

While I am asking questions - Has anyone a really super way to carry a Minox tripod?

Don

Source: AOL

Re: Minox CD25 (1998-02-17T07:34:31)

Mike Black wrote:

> (I've yet to see other APS panoramic prints that looked really sharp and
> contrasty.)

Mike, the APS panorama format is just a tad bigger vertically than the 8mm of an 8x11mm Minox negative,
<http://www.minoxlab.com/dk051597/dkneg.htm>
so you should compare print quality with that from a IIIs, LX, EC, etc.

Don

Source: AOL

Re: Dead light meters (1998-03-12T12:32:07)

Mike -

I'll respond on the list since the information may be of help to others. This has been THE place since I can't remember when. He fixed my SEI Exposure Photometer some time back, when most people didn't know what it was. I hope he is still there. Perhaps someone in the 213 area can call to see if he is still around. He can tell you exactly what can and cannot be done.

Quality Light Metric
6922 Hollywood Blvd., Suite 210
Hollywood, CA 90028
(213) 467-2265

Don

Source: AOL

Re: Minox meter repair (1998-03-17T21:25:18)

Mike Black wrote:

> I just tossed my Leica 3 and Minox meters into the scanner and marked them into a web page

I just purchased one exactly like your Leica 3 a week ago from an estate sale.

It is a Metrophot 2 and has a slip-on incident diffuser, hot-shoe adapter, and a leather case. It is right on as checked with my SEI Exposure Photometer. Perfect companion for the IIIs. Fantastic!

Don

Source: AOL

Re: Re estimating exposure w/Minox IIIS (1998-03-18T13:34:41)

Michael Goldfarb wrote:

>

> there's no significant difference between 1/100 and 1/125 -

In fact, "there's no significant difference between 1/100 and" 1/200 with my IIIs. The shutter controls on the A and B cameras are mechanical, and WILL wear. One ought to try "running the scale" once in a while to see if the each speed produces a different result. For years I just set it somewhere in the area for sunny days or dull days - worked fine.

Don

Source: AOL

Re: Ilford 16mm film (1998-03-21T12:46:10)

> > The next choice is a real Minox slitler.

> > I believe, even Don bought a Minox slitler

>

> "Even Don"? I'm not going to touch that one! :-)

If I am the Don, the answer is no! I like mine. But the Minox slitler DOES work as a number will attest, and provides exactly the correct width, is small, and simple to use. If I hadn't mine, and could afford one, I would.

Don

Source: AOL

Re: My new/old Minox C (1998-03-21T12:51:48)

Roger Beamon wrote:

> What I don't have is a manual.

You don't need a manual. It is the most "user friendly" camera I know. Just remember that the little light that doesn't always work, is a "low light" warning - NOT a battery check. Just go have a BLAST!

Don

Source: AOL

Re: more on the Minox C ... (1998-03-22T13:20:59)

Godfrey -

The prices are higher than I remember - do you know the date of the Minox C factory brochure?

Don

Source: AOL

Re: Using IIIs w/handheld meter (1998-04-14T11:58:38)

Tony Kekalos wrote:

> On the f-stop dial there are two dots between f2.8 and f4. One of
> these, I'm sure, is f3.5, but I don't know which one or even if it's
> that critical/important.

>

> While I'm asking this question though, does anyone know how to compute
> the intermediate f-stop values? If so, could you pass the formula
> along to me?

Tony -

Thanks for asking. Some time back, I faced the same problem and put my spreadsheet to work. I have posted a table at the MPL site at -

<http://www.minoxlab.com/dk051597/dkexp.htm>

EVERYTHING about f/stops is exponential, so the stop half way between f/2.8 and f/4 is NOT numerically half way. It is a piece-of-cake with a spreadsheet. Let me know if the explanation is not clear. communication is the responsibility of the communicaTOR not the communicaTEE, so help me make the explanation clear.

Don

Source: AOL

Re: Camera Repair (1998-04-25T06:11:50)

> JAMES R TODARO wrote:

> Anyone know of a reputable repairman for a Rollei 16?

Harry Fleenor
Oceanside Camera Repair
909 Aviation Blvd., Suite #9
Manhattan Beach, CA 90266, USA
(310) 374-6506

Harry was highly recommended to me and did a beautiful job with my Rollei TLR. I believe he was with Rollei for some years, and has a small ad in the back of Shutterbug. I don't know if he works on 16s, but it might be worth a try.

Don

Source: AOL

Re: Digitizing submini negatives (1998-04-28T11:54:31)

Ron -

The current crop of "slide" scanners, Nikon Polaroid, Agfa, etc. capture 2700 pixels per inch - that's roughly 106 pixels per mm - so a Minox 8x11mm neg (or slide) will provide about 850 x 1169 pixels. The drum scanners in this town (which Kinkos doesn't have) generally run up to 4x00 ppi. I have had ROTTEN luck having negatives scanned, even with drum scanners. Several of us have had considerable success scanning Minox negs at 2700ppi for the internet since you get about twice the pixels you need. The print size you can achieve

depends on the pixel count you need to get a good print from YOUR printer, generally somewhere between 200 and 300ppi. You can divide the pixel dimensions of your image file by the minimum pixel count needed for a good print to determine your maximum print size.

The slide scanners mentioned above are all priced in the kilobuck range, whereas 10 bit, 600ppi flatbed scanners are now down under \$300. Consider a 4x6 "drugstore" print, scanned at 600ppi. 2400 x 3600 pixels! That's more than you get on PhotoCD and a bit less than what you would get by scanning a 35mm slide at 2700ppi - with a \$1700 scanner. It is enough to make a nice 8x10 print on your printer.

Two things to worry about -

1. The pixel count, which gives you information (detail)
2. The bit depth, or number of bits per pixel - more is better for good shadow and highlight detail- for good work, you need at least 10.

I have put together some food for thought at -

<http://www.slonet.org/~dkrehbie/2photo/digital/dig.htm>

The conventional wisdom stipulates that one ALWAYS use the primary source (negative), so I may be the only person on the planet that thinks scanning prints is the best way to get the superior digital files and prints from really small negatives.

Don

Source: AOL

Re: scanners (1998-05-14T08:50:09)

Godfrey DiGiorgi wrote:

>.... it's purely a matter of how good a print you're scanning, how good the
> scanner/software system is, and how sophisticated you are with using the
> scanner software. A poor print ultimately makes a poor scan.

Absolutely. A print (or for that matter, a negative) has black regions either from expressive choice (like simply omitting quiet passages from the score of a symphony), or poor technique.

A good (at least 10 bit) reflective (flatbed) scanner will "see" a lot more shadow detail than you will with normal viewing. The print, like the original negative, must contain all of the needed information.

> I don't mean to be argumentative, if it sounds that way I apologize. My
> opinions are based on having the equipment and using it a lot over the
> past 18 months, so I guess I'm getting to be a bit crotchety about it ...

Don't apologize, Godfrey. I think you should be "a bit crotchety", I am.
This argument continues to surface. I have had it with people who should know better (but have no comparative experience)

Can you imagine publishing houses scanning negatives for all of the photography books in publication and then having the photographers dodge and burn the digital images. I have a 16x20 poster of AA's "Clearing Winter Storm" which I have studied next to a signed print of the same size. Admittedly, I am past my prime, but I cannot see ANY difference from 3 feet away (even closer). Mine is framed behind Plexiglas. I saved \$19,323.13 (including tax). The fact is that, for years, prints have been scanned for publication, and before that, re-photographed - talk about loss! Since the re-photographing of the source print added contrast, AA learned early on that he had to make special prints for the printer. So why should we be any different?

We are not talking about 4x5 negatives here. If I could get a transmission scanner with 15,240 ppi optical resolution (needed to scan a Minox negative with the same pixel count as an 8x10 print scanned at 600ppi) for \$300, I might change my mind.

Don

Source: AOL

Re: First Photos and shutter-release question (1998-05-23T19:48:31)

It occurs to me that Mike may have an unusually sensitive "hair trigger". I have seen Minoxii that just needed a slight touch to fire. Mine require a SERIOUS squeeze. Does anyone know if there is a spring that could have broken on Mikes? There certainly is no need for a protective collar on a properly adjusted shutter release.

Don

Source: AOL

Re: minox ss reel (1998-05-24T14:41:14)

Peter Zimmerman wrote:

> What you really want is a tank lid for an SS tank that will hold an
> existing Minox tank's collar and drum...

No!

What I "really want" is a Minox drum that is 2 inches rather than 4 inches tall and enough larger in diameter to accept 42 exposure strips.

Don

Source: AOL

Re: minox ss reel (1998-05-24T14:49:37)

I didn't mean that to sound abrupt. Sorry. Originally when I got a Minox tank, I intended to make a 250cc tank that would hold the Minox drum, and to test the theory that it would improve my negatives, I made the pill bottle drum for my Nikor tank. I just have never gotten around to making a new one, and would prefer shallower ridges anyway since, I suspect, they create predictable turbulence. AND I just don't have the heart to cut up a never used Minox tank - it's the only piece of "mint" equipment I own other than my Honeywell "Minox" reel.

Don

Source: AOL

Re: minox ss reel (1998-05-25T12:26:49)

> The best reason for using a reel instead of the minox tank is you can do ... more than one roll at a time.

You are absolutely correct, Joel.
THAT is the best reason I have heard for reels.

Don

Source: AOL

Re: Testing lenses, etc. (1998-06-25T17:12:18)

Wolfgang Fischer wrote:

> ...why give distances in feet and not in meters??

I agree, the unwillingness to fully adopt the metric system is yet another example of man's inhumanity to man - or stupidity - or "bean counting" - or all of the above. And I have the wrenches to prove it! I have just rechecked my depth of field calculations and, of course, had to make the conversion both ways - NUTS!

Don

Source: AOL

Re: DOF considerations (was: Save MONEY with your MINOX NOW) (1998-07-16T12:17:33)

Karasev, Alexander wrote:

> It is my understanding that enlargement ratio to get the final print
> affects the functional DOF value. So what would be the 35 mm aperture to
> match Minox DOF in this context?

You betcha, Alex! Depth of field is determined by the size of the circle of confusion ON THE PRINT! There is a chart that might illuminate the situation at -

<http://www.slonet.org/~dkrehbie/dofdiff/dkdof.htm>

There IS an interesting aspect that has not been addressed, and that is that a larger circle of confusion may be tolerated in a large Minox print because the entire print is less sharp. The contents and texture of the scene, the location of the "less sharp" details, the DIFFERENCE in sharpness throughout the print, all affect what one perceives as sharp. "Not so sharp" is made all the more evident through close proximity with "really sharp".

Don

Source: AOL

Re: Minox Exposure Chart (1998-07-21T09:34:36)

MARTIN TAI wrote:

- > $11/3.5 = \pi$
- >
- > $\pi^2 = 9.9 \sim 10$
- >
- > Hence $1/(10 * \text{asa})$ rule.

Help, Martin! If apertures are based on a system of square roots (the series starting with 1, you can create a spreadsheet with column 1 being a series of integers each larger than the preceding one by 1. The second column is merely the square root of the value in column one. The second column will contain every f/stop you have heard of and, if "f/3.5" is the square root of 12, it should be f/3.4641016, according to my calculator. So if f/11 is rounded DOWN from f/11.313708, why isn't f/5.655854 rounded up to f/5.7?

Actually one can arrive at the 10 times the asa rule for the Minox by simply inspecting the scale on an exposure meter. I have a small white triangle on my Pentax dial at f/3.4641016. Whether you use an f/16, f/11, f/8, or f/5.7 Rule depends on how far you need to dig into the shadows. A gray card (upon which the f/16 Rule is based will read around EV 14.6 in bright sun, or about 2.5-3 stops below the brightest luminance (sunlit cumulus clouds at 5,000 feet). You can have shadows as low as EV 7 in the same scene - that's nearly 8 (EIGHT!) stops below your "middle gray" reading. If you want ANY shadow detail, you had BETTER use something other than the "f/16 Rule". In fact, the f/16 rule was never intended to provide for shadow detail, and works best for luminance ranges of about 6 stops. Any more than that and you need to start moving in the direction of an "f/1 Rule.

Don

Source: AOL

Re: Tiny Exposure Meters (1998-07-21T09:55:49)

Bob Christopher wrote:

- >
- > I am looking for the smallest exposure meter available,

> or ever made. Something pocketable or perferably one
> that slides into the hot/cold shoe of Olympus Pen
> half-frame cameras. Anyone have any recollection of
> such meters? Thanks.

The Metrophot 2 I have measures 1.125 x 1.25, by .75 inches deep - has a hot shoe clip and clip-on diffusion screen. The Metrophot came in a variety of sizes in the '50s, and with the "low light flag" were sensitive to give accurate readings in the bistros of Paris. They were super little meters. Of course old meters can still be very accurate, or DEAD, so if you are lucky and find one that has been a drawer since 1950, GRAB IT! There is a picture of one somewhere, I think in the SUBCLUB?

Don

Source: AOL

I HATE to do this! (1998-07-25T21:31:00)

PLEASE, I really don't want to start a lens resolution discussion AGAIN, but I would like to find a source for data on photographic lenses, Leica and Nikon, etc. I seem to recall everything from 50 l/mm on up. The question I would like to answer relates to the maximum enlargement possible when staying within the 1/100 inch (on the print) threshold used to establish depth of field for prints being viewed at 10 inches.

I suspect that since most lenses can be viewed from the rear, that testing is relatively simple. How would one test a Minox lens? Remove it from the camera?

Don

Source: AOL

Re: I HATE to do this! Enough already! (1998-07-29T17:52:44)

When I asked the question, I suspected this would happen. I simply wanted to know if anyone had access to already published resolution data so I could refresh my memory as to whether lenses resolved in the vicinity of 50, 100, 200, 300, or 1000 limes per mm. I know enough NOW, and will certainly NEVER ask such a STUPID question again!

Don

Source: AOL

Re: The Minox ECX has arrived (1998-08-12T13:00:02)

Godfrey DiGiorgi wrote:

> yes, I am in a crabby mood... ;)

Gosh, I thought you were quite civil! AND dead on the mark! I don't have an EC, but I would like one. I borrowed one a couple of years ago at XMas time and it was PERFECT in the living room, AND the flash was perfect! I like to walk on the pier and photograph fishing boats, seagulls, pelicans, seals, sea otters, and the like. The only thing better than the EC is a 35mm with a long lens. The IIIs and LX drive me NUTS changing focus and the VERY narrow depth of field at close range is a PAIN. Since prints larger than 6x8 are marginal anyway, I think the EC is the perfect camera for the original intent of the Minox, . Actually, if one wants better prints than the EC can produce, one needs to get a 35mm camera. I have yet to succeed in my endeavor to make a 6x8 print from a Minox negative (ANY Minox negative) that looks as good as a 6x8 print from a 35mm negative. You think you're crabby, Godfrey ?

The EC has a depth of field from 3.3 feet to infinity for 4x5 prints, and 4.4 feet to 13 feet for 8x10 prints. Most of my best Minox images are within this latter range. The old EC, for me, fits the admonition, "If it ain't broke, don't fix it!"

If I wanted to gripe about corporate ineptitude in could find much better examples in the automobile, and computer industries.

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Source: AOL

Re: Poor Don (1998-08-13T08:11:43)

Sorry about that last message. I was trying to see if Martin had any real evidence and had a momentary loss of control. I apologize for the first sentence - for the last, I would like an answer! Real observational data. At what point is a print from a Minox enlarger better than one from the worlds best "standard" enlarging lens?

Don

Source: AOL

Re: Image quality versus resolution (1998-08-13T17:40:24)

H. Nick Morgan wrote:

> Relative to the human judgement comment above, in the final analysis whether
> a photograph does what it was intended to do is a human assessment. And
> this assessment can vary among people.

Thanks Nick.

The question I need answered is whether what is essentially a camera lens, mounted in the Minox enlarger, can out perform a flat-field lens, of longer focal length, far greater coverage, and specifically designed for enlarging. We have little or no information about the design of the Complan and Minox lenses. What elements of lens design are important in a lens which is transferring data from a flat negative to a flat piece of paper and can these elements also enhance the "taking" function? Did the design of the two lenses include enlarging as a goal? Is there REALLY a demonstrable advantage to the Minox enlarger? Emphasis on the word "demonstrable".

Don

Source: AOL

Print quality as a function of the enlarger lens (1998-08-14T07:52:46) I understand the business of light going both ways, in fact that is the basis for my decision, years ago, to try the Micro Nikkor, which incidentally WAS severely tested against Leitz Focotar, Schneider Componon, and, just for fun, a Summicron, as described in my enlarger section. The bottom line of that comparison was that there was insignificant difference ON THE FINAL PRINT due to lens performance. Printing technique, edge burning, print contrast, etc. all contributed to the order in which the prints were rearranged by the judges. Only the prints from the Summicron were placed consistently last - and that as I recall, was due to edge sharpness problems.

OK, one myth abandoned - If enlarging is done within the focussing range of the camera lens, performance will be acceptable. This explains why Leica camera lenses do not perform well in Leica enlargers. It is the designed RANGE that matters. So the Minox lens is acceptable as an enlarger lens.

Now, my next question. If, with a grain magnifier, I can see the sharply defined grain clumps which make up the somewhat diffused image from the Minox negative (even with Fuji Super HR), AND, if I can see sharp grain patterns making up the rather diffused image ON THE FINAL PRINT, how, without rearranging the grain clumps ON THE NEGATIVE, can I improve the sharpness of the image?

Don

Source: AOL

Re: Print quality as a function of the enlarger lens (1998-08-14T16:37:13)

MARTIN TAI wrote:

- > You cannot rearrange the grain clumps, but the key here is
- > that : with a 200 lp/mm Minox lens, you will get 100 % LESS diffused
- > image on the final print.

Of course I can't rearrange the grains, but you are missing my point. If the silver particles which make up the image are rendered "crisp" (sharp), and I can count the number which make up the image of a line (that's sailortalk for rope), then how can increasing the lens resolution make the line sharper?

The grain is much smaller than ANY part of the image, and it is dead sharp on the easel. Grain structure is independent of the taking lens, so any fuzziness that appears in the negative must be a function of the taking lens - IF the grain is sharp and the image fuzzy - NO?. The enlarging lens can't sharpen fuzz. Making an unsharp mask can, but that is independent of the enlarging lens.

My question is -

If my enlarger lens already projects clear, crisp, sharp, silver grains (clumps), which can be seen to create the image, how can the image be improved IN THE ENLARGER? If I have a letter "A" on a sign and the horizontal bar is ten grain clumps high and the grains along the edge form a fuzzy boundary of gradually decreasing density, how is the enlarger at fault? I'll be happy to buy a Minox enlarger if you can explain how the sharp grains forming the fuzzy line will suddenly form a sharp line without getting any sharper themselves.

Don

Source: AOL

Re: Print quality as a function of the enlarger le (1998-08-15T08:07:19)

Peter Zimmerman wrote:

> Assume infinite sharpness on the neg.

And that is precisely my point - I NEVER have "infinite sharpness on the neg" - the grain clumps being vastly sharper than ANY edges. So, if the grain clumps are so much sharper than any edges they form, and if the grain clumps are sharp ON THE PRINT, why do I need to worry about my enlarging lens? UGH - I went through all this in the '60s. I would have let all of this pass, had not the world been informed that I was shooting myself in the foot! Unfortunately, I am always ready to improve, and if there is the suspicion of a way to improve the final image, I will be happy to take it.

So, I will just keep on asking the fundamental question - If the grains are sharp on the print, how can the image be made sharper? (without unsharp masking)

Don

Source: AOL

STOP! was Print quality as ... (1998-08-16T13:16:33)

Since it was my competence that was placed in question, I would like to close this thread. I will be happy to suffer any indignity to end this seemingly hopeless discussion. I had thought I might learn something, and did from those who have actually used BOTH systems. A friend is sending me his Minox enlarger. I will then make prints using it, my Omega enlarger with a 28mm Schneider, a 25mm Rodenstock, my 55mm Micro Nikkor, AND my 28mm Nikkor. I promise to securely clamp the Minox enlarger into position (no marks, I promise, Godfrey!) and my Omega is already securely bolted to the foundation plate at the bottom and second story plate at the top (with micro adjustments at the top). I will even dig out and dust off the condenser lamphouse for the Omega. I AM curious to see the results and will post same at my venue.

My plan is to make 8x10, full frame, enlargements on RC paper. More as this experiment progresses. It will be interesting to see if the 25-28mm lenses improve on the 55mm Micro. My initial tests years ago indicated no. If any have suggestions as to process, please let me know privately. I will respond no further on this issue until I have the results posted!

I hope to have the prints done for the next meeting of our small group and will let them judge and evaluate the results. They are mostly large format photographers about half of whom earn a living with their imagery.

I will be happy to continue with a CONSTRUCTIVE discussion of this topic PRIVATELY!

Don

Source: AOL

Faulty enlarger lens (1998-08-19T20:39:21)

I have a friend who is trying a couple of enlarger lenses for me and picked up a used (but mint looking) 50mm Nikkor today for test. She describes the problem as a bit too much flare. When stopped down to f/11, it begins to exhibit a darkness along one edge - which gets worse at f/16. Anyone experience a similar condition?

Don

Source: AOL

Re: Faulty enlarger lens (1998-08-21T22:24:28)

Thanks for all the comments. I now have the lens and will try it on my Omega B22 with color head. The problem was with a condenser lamphouse.

Don

Source: AOL

Faulty enlarger lens (1998-08-23T15:13:55)

I see in the B&H catalog that a new 50mm, El Nikkor, f/2.8 enlarging lens is listed at \$135 imported - and \$155 USA. What is the difference between an "imported" and a "USA" lens - warranty? Anyone have an idea of what one should expect to pay for a really nice USED one.

Incidentally, this is the lens that had the "dark edge" problem with a condenser headed Bessler. It works perfectly from f/2.8 to f/16 on my Omega with color head. Obviously condenser adjustment is an artform.

Don

Source: AOL

Re: Faulty enlarger lens (1998-08-23T18:56:36)

Thanks guys! The lens is for a friend and from a reputable store with a full return policy. Most of the stuff for sale in our town is from local "estates". I was curious as to its performance and used Joe's lens tests as outlined in the SUBCLUB. This one checks out VERY well. I won't tell you how it compares with my Micro Nikkor ---- yet.

Don

Source: AOL

Re: Minox Right Angle finder: Why bother? (1998-08-26T11:22:31)

I don't do clandestine photography (when I did, we used 35mm cameras), but I DO, on occasion, find it awkward to get into position for close-up shots. It seems to me I have seen adjustable viewers on just about EVERY video cam, so there must be some advantage. Try taking a picture of a model airplane from ground level. And what about the TLR? Actually I have had the best success with "unobserved" photography with an old Rollei hung around my neck with the top open and a long cable release. It is so obvious that everyone ignores it. And NO, I don't photograph where I am not supposed to. I would LOVE to have a right angle viewer for the Minox, just for general use.

Don

Source: AOL

Re: expo photos (1998-09-11T14:11:15)

Mike -

MARVELOUS! What is the negative size? Do you still have the camera and enlarger?

Don

Source: AOL

Minox prices (Accessories) (1998-09-18T10:28:41)

I just can't resist this since it is a window to the past when these prices were the norm. I just bought a 6x9 Graflex for a "fair" price, which is another way of saying too much for you bargain hunters. It was at my local VERY reputable and oldest store in town. This morning I took the first two test rolls in for evaluation since I have no frame of reference and to me they seem a bit soft. The general opinion is that from f/8 on, even this "lesser" lens, is quite good. The fellow who specializes in used equipment (and knows I am a Minox aficionado) said "Oh, by the way, I was cleaning out some drawers and found these." He handed me a plastic bag with the comment "here's your discount" -

- 1 - Sucherspiegel Modell B (Right Angle Finder) - in the box - marked \$19.95
- 1 - Aufsichtssucher fur MINOX B (Reflex Finder) - in original box - marked \$14.95
- 1 - Aufsichtssucher fur MINOX B - no box and no price
- 1 - Minox Tripod Mount - "Price New \$12.5", Now \$6.95

1 - Minox chain - marked \$5.95

Although we'll argue about that, it illustrates something that I feel strongly about.

1. Patronize your local REPUTABLE small businesses - IF you have one.
2. Loyalty can have unexpected rewards.

Don

Source: AOL

Re: depth of field (1998-09-28T09:55:43)

Computation of depth of field begins with the calculation of the hyperfocal distance. you will need:

- (f) the focal length of the lens
- (d) the effective diameter of the lens *
- (c) the acceptable circle of confusion

The hyperfocal distance equals $f^2/d/c$. The effective diameter of the lens can be computed by dividing the focal length of the lens by the f/stop number.

So, the hyperfocal distance = the focal length of the lens, multiplied by the quotient obtained by dividing the focal length by the f/stop number, and the result divided by the circle of confusion.

The circle of confusion adopted should be small enough to provide the desired visual threshold ON THE PRINT.

AA's states in his original book The Camera and Lens: "At reading distance the eye accepts a circle of 1/200 inch as a "sharp" point; this is the practical criterion of image sharpness or definition."

I generally calculate using 1/100 inch and understand that I can adjust during exposure. BUT REMEMBER that the circle of confusion ON THE PRINT must be decreased by the proposed enlargement factor, since you are making a NEGATIVE! So, if you propose an 8x print, you must diminish the circle of confusion by a factor of 8. As the enlargement factor increases, the circle of confusion must get smaller (on the negative), hence the hyperfocal distance gets larger.

Regarding depth of field: When focussed on the hyperfocal distance, the simplest approach is to remember that the near point is just half of the hyperfocal distance.

>From "Camera and Lens", Ansel Adams -

For focussing distances closer than the hyperfocal distance, where

H is the hyperfocal distance

f is the focal length of the lens,

u is the distance focussed upon

the near limit is

$(H \cdot u) / H + (u - f)$, and

the far limit is

$(H \cdot u) / H - (u - f)$

Don

Source: AOL

Re: Nikon scanners (1998-11-11T18:55:19)

Guys -

I just scanned a "factory load" Color Pro 8x11mm negative from an ECX on the Nikon LS-1000. Scratches, NO. Grain, YES. Dust, YES. I have never seen "abrasions" on any of my negatives, factory and home load. The infamous "Minox Scratch" has a unique signature, and is the only "artifact" I have seen with my scanner. You should not be getting "noise" on your negatives!

Don

Source: AOL

Re: Scanning Negatives on the Cheap (1998-11-30T10:03:10)

WOW, Don!

It isn't often that an idea comes along that REALLY works and saves a bunch of \$\$\$\$\$. I just tried this idea this morning with my 6x9 negatives. Scanned at 600ppi, they are gorgeous and provide 4.5x6.5 inch enlargements at 300ppi

which print VERY nicely. They are MORE than adequate for internet display. I have a 35mm "slide" scanner and have been considering something to scan Rollei and the Graflex negatives. You have just saved me a bundle! Where do I send the finder's fee?

Thanks again!!!

Don

Source: AOL

Re: Horizontal mode with Minox tripod ? (1998-12-10T21:38:26)

I suspect that since the legs are not adjustable, the slot in the ball head was elongated slightly past "horizontal" to facilitate horizontal shots from slightly tilted surfaces. I like it that way and have no trouble aligning the camera with a horizontal object, which I have to do anyway (sometimes not too successfully) when not using the tripod.

The material in the large leg of my 20 year old "factory-new" tripod, which locks the ball, appears similar to rubber. It does not deform when pressed, but has a rather "sticky" feel.

Don

Source: AOL

Re: Tripods (1998-12-13T08:18:21)

I have found a small tripod from Canon which fits my pocket perfectly. It measures 1.25 x 6 x 0.5 inches, has legs that extend, stands slightly taller than the Minox tripod when in use, and has a simple easy to use head adjustment. I have narrowed the round mounting plate to the half inch thickness of the folded tripod. The small adjusting clamp extends another half inch. It weighs 75g., whereas the Minox tripod is 125 g. on my scale that rounds to 5 grams. Sorry, no cable release.

Don

Source: AOL

Beseler 23CII, again (1998-12-15T14:48:37)

Once again, I need some help with the Beseler 23CII for 35mm and Minox. If anyone is ACTUALLY using this enlarger for these formats would simply answer "yes", I will set up a small list to ask some questions. Thank you.

Don

Source: AOL

Re: EC Flash (1999-01-12T21:29:23)

On the topic of EC flashes -

I have a friend whose EC flash will not work on his EC but works on my ECX. Is there a simple "home fix" for the contacts on his EC?

Don

Source: AOL

or at least TALK about submini cameras.. (1999-02-14T21:46:35)

OK, I'll do that. Today I praised Walter Zapp with EVERY aching step. I often hike up a canyon to some beautiful oak covered back country, encumbered with no more than a Minox B and/or C. Today the cumulus clouds were perfect, so I grabbed the tripod (heavy) and camera bag (heavy with 35mm and 6x9) and followed my usual route. UGH!

There is no question that medium and large format, and even 35mm negatives are a pleasure to print and can yield marvelous 11x14 and 16x20 prints. BUT thanks to the Minox and many marvelous 8 inch prints, most of the great spots were already catalogued and tripod holes committed to memory.

I had a wonderful day and finally got exactly what I wanted, but pondered all the way back down whether the larger prints are REALLY worth the pain. Most of my "large format " friends (in a similar age group) seem to be gravitating toward medium format cameras like the Mamiya 7. I guess I just got there sooner, skipping both medium format AND 35mm.

Thanks again Herr Zapp!

Don

Source: AOL

Re: What do I need? (1999-02-18T14:57:52)

Karasev, Alexander wrote:

> THAT would be cool for someone to do (MPL?) If they could take a Polaroid
> SprintScan 35 Plus and modify or replace its lens (and neg. carrier) so that
> Minox negs are scanned with the whole 2600 or so pixels across, I think I
> would be interested.

The current standard for negative - slide scanners (at least this afternoon) is 2700 ppi, with a price still above \$1,000. That gets you a Minox image of 850 x 1169 pixels. Divide by 200 or 300 and you will see the size print you can expect. Even double the pixel density and you don't have much. A 35mm negative will scan with enough data for an 8x10 inch print and the Minox negative is 1/3 the size. It is going to take a couple of jumps or a REALLY big one to scan Minox negatives and get the information you can now get from a flatbed (\$200) scan of a 6x8 inch print.

Don

Source: AOL

Minox in the "movies" (1999-03-10T08:45:08)

This morning on my way from the History Channel to the Weather Channel, I passed by A&E and there in all its glory was a VERY brief view of a black Minox taking a picture of something. The program was called the "Equalizer". A quick check of the schedule tells me that it will repeat later today. I havent any idea what the program is about, but for those interested in such things, it may be another contact to log.

Don

Source: AOL

Re: Further to "Don K.'S Minox Reel".... (1999-06-12T11:03:17)

Curt Miller wrote:

> About what dimensions are best: diameter and height?

The pill bottles I have are from the past and are clear plastic with a twist top. They have a small "4 oz." on the bottom and are a tad under 2 inches in diameter and 3.625 inches tall. If I cut the top off to reduce the height to 2 inches, they just fit in a 250cc Nikor stainless steel tank WITH the STAINLESS STEEL top! The plastic tops are another story. I recently broke a top and had to search the back shelves of the camera stores to find another ss top.

I got the idea for the pill bottle from the Minox tank, but never thought of using a tank designed for a 70mm reel. Great idea!

I find that 250cc is fine for PMK and now get negatives unlike none before. Great stuff. Thanks to Gordon Hutchings!

Don

Source: AOL

Depth of Field (1999-06-16T13:00:31)

Sorry for the delay responding. Every time I have to re-install Netscape, I lose either my Mail folder, Bookmarks folder, Address folder, or "all of the above". - and I have done that a lot lately.

Yes, I have the formulae at -

<http://www.slonet.org/~dkrehbie/2photo/dkdof.htm>

-which would allow you to build a spreadsheet. Remember - the degree of enlargement has a MAJOR effect on the depth of field - not usually a problem with larger formats, but a killer with the Minox.

Source: AOL

Re: B+W Viewing filter question... (1999-07-25T17:43:13)

> ...although I don't think I would tote it in addition to a Minox when I was
> trying to minimize

> my load.

Precisely why having a piece of Wratten 90 in a Gepe mount in the wallet works for me. I would never have the Zone VI viewer when I wanted it either. I often pull out the Gepe to check the scene before reaching for the Minox. If it looks good or can be corrected with whatever filter the Minox has in it, I go ahead. Quite often, what looked GREAT in color, is a dud in B&W.

Source: AOL

Re: Camera Lenses On Enlargers (1999-07-29T19:11:29)

A camera lens DESIGNED for flat field and close-up work will work fine. The lubricant doesn't seem to migrate and the heat (if there is any) doesn't seem to damage the lens. I have had my 55mm Micro Nikkor in the enlarger since the mid-late '70s. It just stays there, only to be taken out when I need it in the field. It has been compared with Leitz, Schneider, and Rodenstock lenses in blind tests of B&W printing, showing no signs of inferiority. It mounts on the Omega B-66XL and the Beseler 23CII. I am careful to use set the lens AND the enlarger at 0.8M and focus with the bellows - then ONLY with the lens focussing ring - so the lens MUST focus internally as close as you will be working with the enlarger. THAT is the major advantage of a camera lens - the ability to focus by twisting the lens ring itself - VERY smooth and accurate.

During the initial tests when I was convincing myself that the 55mm Micro Nikkor was a satisfactory alternative to an expensive "enlarger" lens, I also tried a Summicron from my Leica IIIIf with marginal to bad results.

1. If a camera lens is used, it should be designed for flat field and close-up work - a macro (micro) lens which will focus internally to the distances needed with the enlarger.
2. For Minox 8x11mm negatives, a wide angle (I use my 28mm Nikkor) standard camera lens will give excellent edge to edge coverage - even wide open - because only the center portion of the lens (designed to cover 35mm) is used.
3. If you don't do the experiments yourself, you will ALWAYS have the nagging feeling an "enlarger" is better, so I am probably the only one who believes this, and the only one saving all this money.

Don

Source: AOL

Re: Camera Lenses On Enlargers (1999-07-30T11:03:48)

Godfrey DiGiorgi wrote:

> ... the falloff would cancel in negative-positive printing.

Back in the '70s when I compared the 55mm Micro Nikkor with whatever Leitz , Schneider, and Rodenstock lenses I could borrow, I also tried the Summicron from my Leica IIIf. As I recall, it wasn't light falloff that made the difference, it was edge sharpness. At least none of the Summicron prints were chosen as "BEST" from the 20 plus prints scattered around the table.

Various tricks, such as differential edge burning and contrast variations, were used to "fool" the judges, none of which worked - the Summicron still didn't make the cut.

I seem to recall, after considerable discussion, using f/8 or f/11 for all the tests.

Don

Source: AOL

Re: Photoshop LE Versions? (1999-08-19T19:28:45)

"Larry J. Clark" wrote:

> I recall someone in an earlier thread saying that the layers were very
> convenient when working with the images.

Layers, especially "Adjustment Layers" have become for me the most important feature of Photoshop. "Adjustment Layers" allow me to adjust curves, levels, etc. and retain the setting for future modification. These combined with a "dodging & burning" layer have transformed my use of Photoshop. Now if we only had a really high level program for creating non existant pixels, we could make mind blowing 16x20 contact prints from Minox negatives.

Source: AOL

Premiere e-mail list? (1999-09-14T12:29:59)

Totally off subject, but where else would I turn for good advice? Does anyone know of an e-mail list similar to this one for Adobe Premiere? I have found lists for Photoshop, Professional "Digitizers", and Epson ink-jet printers, but I have no idea if there is a "master" list of e-mail lists. Actually I hate to display my stupidity - what I DON'T need is another "hobby", but I have a bunch of video I want to digitize, and am interested in making up slide shows which can be viewed on a TV. If I put a Minox derived image into one of the slide shows, I guess this will become a relevant question.

Don

Source: AOL

Re: My Quest (enlarger question) (1999-09-26T13:16:41)

Just a subjective comment. Having traded my Omega B22XL for a Beseler 23CII to accommodate 6x9cm, I think twice before enlarging Minox negatives. Among other things, the carrier is too big, and the Dual Dichro color head only produces half the light of the Omega color head. The Omega B22XL was a great Minox enlarger. With the Beseler, I would get a Minox enlarger if I could find one - it was not necessary with the Omega.

Don

Source: AOL

Whoopie! (1999-09-30T15:53:53)

I just received from a set of 4x6 inch prints, and several 10x15 enlargements, from a roll of 35mm Fuji New Reala. They are gorgeous - the result of scanned negatives and laser exposed prints. Even with the insertion of the digital process and consequent loss of fundamental information, the prints are sharper and clearer than I am getting from our highly regarded local "analog" shop. Apparently the future is here. If you visit <http://www.epixel.com> and note the address (and the "MPL" stamp on the back of the prints), it will be no secret that Don Thayer is up to something. No Minox service (yet), he's not talking, and I'm not asking, but he can make beautiful prints from 35mm & APS, including slides. I'm readying a couple of slides!

The idea of exposing photographic paper with a laser from a computer file

has been around for several years, but not in the general photofinishing business, and certainly not at "photofinishing" prices. I can see that the Butterfield Stage will get some additional business between here and the railhead.

Don

Source: AOL

Re: Ink jet printers (1999-10-31T21:59:44)

Ron -

I am printing contact negatives on an Epson Photo 1200. They range up to 11x14 inches, which is why I got the 1200. I cannot see ANY dots in the contact prints made therewith. Examination of the prints with an 8x loupe CAN reveal a slight "corduroy" in the middle tones, but not always, so I am now in the trail of THAT problem. Other than that, which is not visible with unaided vision, the prints on Ilford MGIV FB show no evidence that they were not made with an optical enlarger.

When making direct prints, using black ink only, dots can be detected in the light areas. Using colored ink minimizes the effect, but adds color contamination to grayscale images. The solution WILL BE "quadtone inks" where grayscale inks are used to replace the CMY inks in the color cartridge, and still provide the finer dot pattern.

At present, the Epson Photo 1200 appears to be a spectacular machine, and SURPRISE, it even FINALLY prints good color with a Mac.

There is a "letter size" version but I can't remember the number.

This topic has EVERYTHING to do with submini, since it allows me to make 11x14 contact prints from Minox negatives, AND will lead to the next step - platinum prints from Minox negatives.

There is an important benefit from making negatives with the ink jet printer. In the lighter areas where the printer dots tend to be most noticeable, the negative is most dense, eliminating any dots. In the dark areas where there are few dots on the negative, the final print is most dense, eliminating the dots. The negative masks the deficiencies of the ink jet printer.

Don

Source: AOL

Re: Minox repair (1999-11-10T21:40:25)

Would you guys PLEASE retitle this Kiev discussion as a Kiev discussion. I am interested in Minox repairs, but NOT Kievs

Don

Source: AOL

Mod I Minox enlarger on eBay (1999-11-20T17:30:50)

There is a Model I Minox enlarger on ebay. There were few made, serial numbers 100 to 791 according to Heckmann.

<http://cgi.ebay.aol.com/aw-cgi/eBayISAPI.dll?ViewItem&item=203979767>

Source: AOL

Re: New Minox gallery pages (1999-11-20T18:00:36)

Godfrey,

Now you've done it! Raised the bar. The interesting thing is that the small images are so satisfying, I have no NEED to see the larger images. My long held rule, "If it isn't good small, enlarging won't help!". These, to me, are what the Minox is all about.

Don

Source: AOL

Re: Getting ready to sign off... (1999-11-23T12:24:18)

For those of you new to the "list" -

Michael has written, for Platypus Camera,
<http://www.platypuscamera.com/minox/>
, a comprehensive Minox history and product guide, illustrated with photographs

of various models and accessory equipment.

He has fine images at the Olympus Gallery

<http://www.taiga.ca/~gallery/subpages/goldfarb/goldfarb.html> , and links to Minox images and another very fine article on the Minox Camera. Excellent resource!

Michael was my first "e-pal", introducing me to the Submini List, and contributing to my photographic growth. Michael, I appreciate your ability to stay focussed in the presence of chaos. Please keep someone apprised of any new endeavors spilling from your talented fingers.

All the best,

Don

Source: AOL

Re: Minox BL lens & film gate (1999-12-11T15:15:32)

Lew Steinfeld wrote:

> Don, I am astonished that in all the exchange of e-mails about Minox lenses,
> nobody ever mentioned the original Minostigmat.

Again according to Heckmann, the "Minostigmat" was designed by "Professor Schultz in Vienna". Apparently it was less than ideal at the edges and after the war, after several tries, the Complan was designed. Being less historian than pragmatist, and not having an early Minox, I never felt the need to include the "Minostigmat". Heckmann alludes to the fact that the "Minox" lens replaced the "Complan" for legal reasons rather than performance considerations.

You're forcing me to READ the book I have had quietly on the shelf. Horrors!

Don

Source: AOL

Re: Ebay madness (1999-12-11T18:27:18)

"James A. Jones" wrote:

> It's madness!!

"Ebay madness" depends on the item. A week or so ago I was watching a Minox "Complan" C which looked VERY nice. It was sitting for several days at under \$150. I jumped in the last minute and lost it to one of our list members who was smarter than I. If that camera was as nice as it looked, it was a REAL bargain.

Don

Source: AOL

Re: Ebay madness addendum (1999-12-11T22:18:32)

Tim & Ronna wrote:

> People always say things like
> "rats..that so and so beat me by a dollar in the last 30 seconds"

Exactly! That is what happened to me. I had not played before, thought that particular camera was nice, signed up, and bid into just such a situation. Not a problem, and the fellow who got will make beautiful images with it, so we were both happy. I now know the rules and will not make the same mistake again. It IS an interesting scheme, unfamiliar to me even though I worked in an auction gallery while in college.

Don

Source: AOL

Re: Minox enlarging times (1999-12-12T08:28:05)

Kip -

In order to print 6x9cm negatives, I recently traded my Omega B-22XL with color head, for a Beseler 23CII with Dual Dichro color head. Worst mistake of my photographic career. The Beseler puts out exactly HALF the light on the table as did the Omega, so now my exposures are twice as long. I have always used my 28mm Nikkor camera lens to enlarge Minox negatives (some think this is shameful) and generally at f/3.5 to f/5.6. I think it makes

no difference since only the center of the lens is being used. But, to the point. With Multigrade (NOT WARMTONE which is MUCH slower), it was not uncommon to have 30 to 40 second exposures with white light. However, I generally expose with the yellow and magenta filters separately (split filtration), so the total time can easily exceed a minute. THIS WAS WITH THE OMEGA! The Beseler takes TWICE as long.

I did borrow Godfrey's Minox enlarger and found the times GREATLY reduced. It is a delightful machine - with the lack of a VC or cold light source the only drawback.

I don't have a comparison between Minox and 35mm exposure times, but the area calculation should be close. I typically use MUCH smaller apertures for 35mm and 120 negatives than for the Minox.

It is possible that your Minox negatives are more dense (including fb+f) than your typical 35mm?

Don

Source: AOL

Minox film strip lengths (1999-12-13T20:20:36)

fattrax wrote:

> How long is a Minox 36 exposure roll?

15 exp = 32 cm - 12.9"

30 exp = 52 cm - 20.3"

36 exp = 59 cm - 23.2"

50 exp = 77 cm - 30.1"

Pete zimmerman did the arithmetic some time ago.

Don

Source: AOL

Film and Processing in New Zealand (1999-12-19T21:49:47)

Kiaora,

I've just had a request for Minox sources in New Zealand. I have a bunch of Minox negatives from there, but never saw a source.

Don

Source: AOL

Re: Kodak T400CN & Ilford XP2 (Fri, 3 Apr 1998 15:51:53 -0700)

Godfrey DiGiorgi wrote:

> Differences between the four images, at least on my screen, are somewhat
> difficult to see.

I agree - it is much easier to see in the actual prints. The XP2 at 60cc Y is definitely muddy, and the Kodak print with white light has burned out whites which contribute to the "lively" look. Actually, the best print I just made is with the XP2, white light (#2 paper) and a quick "dry bleach" to tweak the white highlights without losing the definition in the hatch.

The best of all worlds is to scan the print made with the XP2 negative and white light, using the auto-lightness, auto-contrast settings. The Photoshop histogram shows a full tonal range, and only a slight adjustment is necessary in the midtones. The print made on the Epson printer with Epson paper is the best of the lot. The problem here is that when using the camera's auto exposure to make the negative, one has no idea if the shadow and/or highlights will be "off the scale" and render without detail. This is precisely what happened here. Based on what the camera's meter "saw", both negatives are underexposed, showing no detail in the dark sail cover. The XP2 negative has detail in the highlight (white) areas, the T400CN negative does not.

> XP2 was a lot harder to scan from the negative and balance for a snappy
> looking image on the computer screen.

I just tried and have to agree that XP2 is tough to scan. The tonal range and sensitivity curve of the scanner (Nikon LS-1000) make a low contrast dense negative particularly tough. But you know my bias toward scanning prints. In reality, I suspect that most slide scanners were designed to optimize color slides anyway.

Don

Source: AOL

Re: Minox C questions & answers (Mon, 2 Feb 1998 20:42:39 -0700)

All right already! C'mon you guys - I have a Minox C so am interested in discussions thereof. A Minolta 16 I don't have. How about changing the "Subject" so I don't have to read a lot of stuff about which I care little. We all need to attend more to "Subject" protocol.

Don

Source: AOL

Re: How to you know about submini list ? (Mon, 3 Aug 1998 14:36:11 -0700)

Henshall, Steve wrote:

- > Also while I'm at it. I am using a color enlarger. with a 25mm lense.
- > With the variable contrast BW papers I think Magenta will add contrast. Not
- > sure about that.

Yes, magenta adds contrast and yellow the reverse. I find it useful to make a test exposure with full yellow, making stripes by increasing the exposure, to establish the proper exposure for the high values, then expose the entire image with yellow and then create strips with pure magenta. You can then expose the final image with 2 exposures, one with the proper amount of time with full yellow, and the second with the proper amount of full magenta. I think it is easier than trying to find the perfect amount of magenta and yellow mixed for a single exposure. I'm sure someone will come up with an internet reference for this procedure, as it is quite popular.

Don

Source: AOL

Re: How to handle Minox with case & chain (Mon, 4 May 1998 21:15:12 -0700)

Michael Goldfarb wrote:

- > ... owners of LXs are really in luck: there are loads of used wrist straps around from old movie cameras, both 8mm and Super 8, that attach via tripod screws.

Absolutely correct, Michael - BUT, if you do this -

Be SURE that the wrist strap is ALWAYS securely attached into the bottom of the camera. If not kept tight, the threaded part of the wrist strap will unwind out of the camera. Mine came loose and the LX fell on the concrete railroad platform, leaving small shiny spots in the beautiful black finish. It could have been worse, I tend to lean over the ocean a lot.

Don

Source: AOL

T & B (Mon, 7 Dec 1998 22:03:13 -0700)

Are there any modern P&S or submini cameras equipped with "time" and/or "bulb" settings. I have a friend who likes to take time exposures at night but doesn't want to carry a full 35mm camera.

Don

Source: AOL

Re: Early Minox Enlarger (Mon, 7 Dec 1998 22:13:08 -0700)

Peter Zimmerman wrote:

- > You'll usually find that going to diffusion enlarging makes a
- > smoother Minox picture and that the point-source illumination w/o the plate
- > results in harsh results. Now, Godfrey and Don, don't jump all over me;
- > this is very, very subjective.

Wouldn't think of jumping all over you, Pete. I ALWAYS use a color head for Minox enlarging, and totally agree with your assessment. I was however surprised at the imagery with Godfrey's Model II without any diffusion. Most of my colleagues use either color heads or cold light sources, with a lone exception who does beautiful work with a true point source.

Don

Source: AOL

Re: MPL (Mon, 8 Nov 1999 16:17:39 -0800)

Both references are at -
<http://www.slonet.org/~dkrehbie/minox/mpl.htm>

Don

Source: AOL

Re: Who Are You (do do, do do) (Sat, 1 Aug 1998 22:30:51 -0700)

Name: Don Krehbiel

Age: Old enough to remember the Graf Zeppelin coming over the house at about 500 feet, and chasing after it in the car to its landing site. Actually 72.

Occupation: Re-tired (does that mean tired again?) from teaching computers to act like people, and people to understand how to teach computers to act like people. My seventh grade students, in the '60s, learned more quickly than my college students, in the '70s - and a LOT more quickly than my computer systems in the '60s, '70s, or '80s.

Reside: San Luis Obispo, California. Formerly of Santa Monica and Pacific Palisades.

Education : Enough to know that my students were usually smarter than I. Actually majors in Zoology, Psychology, and Mathematics. The Psychology was most valuable in understanding computer behavior.

Submini cameras: A nearly destroyed Minox IIIs and what's left of an old LX

Expertise: Not much, that I know of (certainly not English as evidenced by ending the sentence with a preposition)

Interests: When I was young(er): Surfing and downhill skiing. Currently: Historic aircraft (most of which were state of the art when I was first introduced to, or building, them); Photography (naturally); Radio controlled model airplanes and gliders; Genealogy (age has something to do with this, I think); Educational computing; etc.

Web Venue <http://www.slonet.org/~dkrehbie/>

Source: AOL

Re: Olympus Pens (Sat, 3 Oct 1998 07:14:50 -0700)

Michael Goldfarb wrote:

> > No, wait a minute, if a half-frame is more-or-less half of a 24x36
> > 35mm frame (duh!), and a Minox negative is ROUGHLY one-quarter the
> > size of 35mm, wasn't I right the first time?!?
> >
> > Don, Pete - help me out here!

Michael -

If 35mm is 24x36 and Minox is 8x11, isn't that almost exactly 1/3? - or must not one enlarge 3 times as much on the enlarger. I have never bought Pete's argument about AREA, feeling that the enlargement factor was a better measure of the relative size. If half frame is what it says then 18x24 is APPROXIMATELY twice the Minox. In fact, the APS "C" format is almost exactly the same size as a half frame.

<http://www.slonet.org/~dkrehbie/2photo/negsiz.htm>

You're absolutely correct, we have been over this before, but there are always new members, so ...

Don

Source: AOL

Re: Enlarger bulbs, film scanners (Sat, 6 Mar 1999 18:20:51 -0700)

Having used Godfrey's enlarger most recently, I must interject that the "incorrect" bulb was no problem. Recently we went through a hassle about whether one could get good results from a "normal" enlarger. I have always used an Omega B22 XL with my 28mm f/3.5 Nikkor as an enlarging lens, and was assaulted for same. The results from Godfrey's machine were well within acceptable limits (he has the prints) and I would not spend a penny or minute trying to find another bulb. I doubt that there is anyone on the planet more critical than I, and I was delighted with the Mod II and "wrong" bulb. I did use VC paper and simply held the yellow and magenta filters under the lens to achieve the proper contrast. Godfrey is correct and this enlarger is "no

great collectible", but I did not feel that any significant improvement would be possible.

I don't know what bulb godfrey had in the enlarger, but my suggestion would be to try any bulb that fits before spending a lot of time and money on the "perfect" match.

Don

Source: AOL

Re: Rare B with Minox lens (Sat, 8 Jan 2000 16:39:33 -0800)

Peter Zimmerman wrote:

> AFAIK the "Minox B" (sorry for my error in typing) uses a flat focal
> plane. I cannot imagine that the company wouldn't have made that much of a
> change when they swapped the lens. It is also possible that the camera is
> MARKED "Minox Lens" but really uses a complan.

Is it possible the camera has acquired this incompatible combination OUTSIDE the factory?

Don

Source: AOL

Re: Value of Cameras (Sun, 1 Jun 1997 15:21:53 +0100) >

Look at those Leica M3 s out there selling for \$600 to \$1000. If you took, say \$350 in 1957 (which I think was the cost of an M3 with the Summicron lens)

I just noticed this thread and was interested in the Leica price. I looked up the receipt from Frankfurt, June 1954 for Leica M3 body (# 751) with 50mm (Summicron) lens. \$270 (\$US). The Leitz Summicron 35mm f/3.5 was \$55. I don't remember what the duty was but somehow 10% comes to mind. These were regular retail prices. It wasn't the original cost of that camera that mattered, it was the considerable cost of keeping it in working order! I have spent more to replace the shutter blades of my Minox than the original cost. Someone once told me during the frenzy of the late '70s, "Don't buy prints because you think they will become valuable, buy them because you like them."

Don

Source: AOL

Re: A pity (Sun, 2 Mar 1997 08:55:44 +0100)

I hope Mr.Pietre does not return "to lurking mode" and I hope Mr. Harrison is not deterred from further participation.

I once sent a partial plan to a model airplane e-mail list, to which I belong, and was told rather unceremoniously that that was a NO, NO, AND, in that case, also violated a copyright. My neighbor thought for two weeks his e-mail was broken because someone had sent him a 1.5MB picture (which was garbage anyway) and his system was so slow he thought it was broken. It happens. I for one, am interested in ALL of the discussions we have had here and feel that the richness of the group would be diminished by the loss of ANY of its parts.

I have written to Larry and think that we should drop the subject and let him watch over us and keep us in line. We owe a lot to him and should let him police the territory.

--

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Source: AOL

Re: Minox/bokeh url? (Sun, 5 Oct 1997 15:57:31 -0700)

<http://www.slonet.org/~dkrehbie/bokeh/bokeh.htm>

Joe Berenbaum wrote:

> I've lost the url for that web page that demonstrates in pictures the bokeh
> (out of focus look) of minox submini lenses. Can someone repost the url? TIA.
>
> Joe Berenbaum

Source: AOL

small minox, BIG PICTURES (Sun, 8 Jun 1997 11:33:29 -0700)

I hope I'm not breaking any important threads, but I have a friend who is interested in acquiring a copy of "small minox, BIG PICTURES". Any ideas of where and how much?

Don

Source: AOL

Re: Other types (Sun, 9 Jan 2000 13:34:44 -0800)

I have just informed Larry of my intention to resign from this group. I have many warm feelings as the result of conversations with many of you, and count some as good friends. But my interests are less with cameras and accessories than with the making of photographs. This list is an important resource and should be vigorously defended against trivialization. We are all short of time and each message which fails to add something significant lessens the value of the list as a whole. Unfortunately, I have fallen victim at times to that trivialization - I too have feet of clay - I WISH I had Ansel's.

I have a number of projects which are taking more time than anticipated, and will continue to report the results at my web site. The transition from opto-chemical to digital photography is in its most exciting stage, and I am excited to be a part of the drama.

Cheers everyone!

Don

<http://www.slonet.org/~dkrehbie/>

Source: AOL

Re: Check out my Minox article in RETRO! (Thu, 3 Sep 1998 17:23:49 -0700)

Classy job, Michael! Just like your presentation for Platypus Camera. As I told you jokingly a while ago, you should take up writing (and web authoring) for a living! The format and presentation are simple and elegant without the distracting "webese" that so permeates the internet today.

Don

Source: AOL

Re: Minox enlargements (Thu, 5 Feb 1998 08:35:48 -0700)

Al Doyle wrote:

> Didn't know that Minoxers were having success!

Al -

I have a short discussion on the merits of scanning Minox negatives at -

<http://www.slonet.org/~dkrehbie/2photo/digital/dig.htm>

Don

Source: AOL

Re: 45,000 dpi scanners (Thu, 6 Nov 1997 07:38:38 -0700)

Paul Rubin wrote:

> 1) Where does one find 45,000ppi scanners?

>

> I can't believe there's such a thing as a 45,000 ppi scanner.

> That would be a pixel every 1/45,000 inches, or 500 nanometers.

> That's about one wavelength of visible light. I don't see how

> any scanner could have such resolution in any useful way.

The other problem that concerns me, even with my 600ppi flatbed scanner is the size of the scanned area for each pixel.

1) Is the scanned area, for each pixel, at 600ppi, 1/600 of an inch?
..or at 2,700ppi, 1/2,700 in? ..or at 45,000ppi, 1/45,000 inch?

2) If so, are there gaps when scanning at 300ppi, or 150ppi, or 75ppi?

3) If not, how big is the scanned pixel area and doesn't the overlap negate the resolution figure, causing sharp edged objects (like silver

grains) to become fuzzy edged objects.

Even at 600ppi (interpolated increases are useless!) on my flatbed scanner, I get a "halo" effect on sharp edges. Obviously, the scanner is reading something other than 1/600 inch. I haven't found anyone who scans things who seems to know, or care, about such things. It seems to me that a scanner which purports to resolve 1/600 inch should produce a sharp edged object of such dimension!

Don

Source: AOL

Re: Some new photos... (Tue, 3 Mar 1998 16:53:17 -0700)

Godfrey -

Your work represents what the Minox is all about. Bravo!

Don

Source: AOL

Re: factory repair policies (was Improvements to the Minox (very (Tue, 4 Aug 1998 15:58:47 -0700)

David Foy wrote:

>

> I'm not familiar with Leica policy. Do they not train and

> authorize independents? I could understand why Minox might

> not (the market being so small), but Leitz?

I don't know what Leica's policy was in the '50s and '60s, but after dealing with E. Leitz, NY a couple of times I found Rudi Lingg, who was the choice for Leicas (and Minox) in the LA area. He also replaced the shutter blades in my IIIs years ago. Everything he did, worked! I have to believe he was blessed by the factory (both Leica and Minox), because he had parts.

Don

Source: AOL

Re: Don's difficulty finding article (Tue, 4 Mar 1997 13:20:00 +0100)

Michael Goldfarb wrote:

> Maybe you're in a time warp,
> and MPL hasn't put the article up YET in YOUR time!

RIGHT! The snail-mail takes a week or more, perhaps electrons take longer than we think. I have cleared my cache, tried Internet Explorer, tried Godfrey's suggestion to append /peterz.html (or whatever), and downloaded the source HTML code, which shows no sign of the article.

I am beginning to suspect a deeper problem, because each time I respond, as in this case, I get a "Returned mail: User unknown" message for a friend but at an address I have never used. Somehow our mailer thinks I am sending a cc to him, I guess.

I would try re-installing Netscape, but why does Internet Explorer provide the same results?

I know we refer to San Luis Obispo as "SLO town" and have "SLO Transit", "SLO Tow", and SLONET, but I never realized just how slo we really were.

Thanks for all the help. I'll try again tomorrow.

--

Don

Source: AOL

Re: Cardona?!?! (Tue, 4 Mar 1997 14:25:49 +0100)

Michael Goldfarb wrote:

>
> Don - I'm getting the same thing! Here's the text of my message:
> =====
> The original message was received at Wed, 5 Mar 1997 04:38:46 +0800
> (SGT)
> from daemon@localhost
>
> ----- The following addresses had permanent fatal errors -----
> cardona@smedia.com.sg

>
> ----- Transcript of session follows -----
> ... while talking to renoir.smedia.com.sg.:
> >>> RCPT To:<cardona@smedia.com.sg>
> <<< 550 <cardona@smedia.com.sg>... User unknown
> 550 cardona@smedia.com.sg... User unknown
> =====
> This is so weird! - MSG

That's it! Somehow Georges Cardona is being introduced to the group. As I said, he is a fine photographer with a renewed interest in the Minox. However, I haven't the faintest idea of how this phenomenon has come to pass. I wonder if it is some kind of virus. I have written him, but not at that address. He works in Singapore, so the e-mail address .com.sg is reasonable, and smedia.com.sg is a valid site address.

If you are getting the same error, we need to isolate the source.

Don

Source: AOL

Re: Don's difficulty, and Michael's, and Joe's, and Cardona (Tue, 4 Mar 1997 14:51:20 +0100)

David Josephson wrote:

>
> This means
> that someone had subscribed to the list, and for one reason or
> another is no longer a customer of this ISP in Singapore.

Of course, you are precisely correct. Nuts, I should have thought of that. I have just sent an e-mail go Georges and will try to get this reference off the table. I think (know) you all will very much like Georges. I have a copy of his book "About Burma/Myanmar" and am very impressed with his vision and skill.

So that one is solved, thanks David, and I have read Pete's article, so what's left? Incidentally, after accessing Pete's article through the backdoor, I clicked on RETURN and got the new home page.

Thank you all for your help. Whew! Now all I have to do is figure out why both Netscape AND Explorer access an old version of minoxlab.com.

> And we thought Internet made our lives simpler?

Than what? Can you imagine doing all of the in assembly language?

Don

Source: AOL

Re: Suggestions for 1st Minox Purchase? (Tue, 6 Jul 1999 20:55:30 -0800)

Tim,

I have a summary (with date and serial number range) of the common models at - <http://www.slonet.org/~dkrehbie/minox/m1.htm>

I carried a IIIs for 40 years and managed to get good exposures without a meter. I have a B, but find the meter (mine is right on) relatively useless since it does not discriminate very well at either end of the luminance spectrum and I can "guess" quite well in the middle where it works. I now carry an ECX which has a limited luminance range, or C with which EVERY exposure is perfect in ANY kind of light, including relatively dark interiors. The IIIs is cute, but so was the Porsche 356. The ECX should not be dismissed offhand.

Decide first if you want an image getting machine, or a cute thing on the end of a chain. If the latter, the IIIs is pure magic, if the former try an ECX, C, or LX.

Don

Source: AOL

Minox auto exposure accuracy (Wed, 4 Mar 1998 06:45:41 -0700)

Godfrey DiGiorgi wrote:

> I continue to be shocked at just how good the Minox C exposure system is.
> The meter and shutter are extremely accurate.

I absolutely agree. I have had the LX exclusively in auto for a year now, and have decided to retire the IIIs. The accuracy of exposure is a delight - in almost all situations. The use of the auto mode has caused me to reactivate the C because of the ease of using the dials, especially the ASA dial (permits "tweaking" when necessary, and an extra stop - ASA 6).

Don

Source: AOL

Re: tips on Minox usage (Wed, 4 Nov 1998 16:34:10 -0700)

Godfrey DiGiorgi wrote:

> > - is there any way to hold the shutter open on the non-auto setting [trick
> > "B"]?

>

> In "Small Minox, Big Pictures" 1971 edition, based on the Minox C,
> Kasemeier documents a hidden "B" setting (to one side or the other of A
> and the next shutter speed, I forget which side to be honest). I don't
> know whether the LX has the same feature. It works on my C very nicely.

I have just been sitting here trying this with my LX. Setting the shutter speed dial nearer the 2000 mark than A does indeed lock the shutter open - SOMETIMES! I have had successful about half the time. The "sweet spot" seems to wander around a bit. The shutter does NOT close when releasing the button, so the simulation is of "T", not "B". I have to move the speed dial to 2000 to close the shutter.

Don

Source: AOL

Re: Minox huge prints (Wed, 5 Nov 1997 15:23:30 -0700)

Thank you Alex -I do live under the trees that were planted to shade the horses at the stage stop, and, although a college town, we have somewhat limited technology compared to Hollywood. So I can't find anyone in town with a drum scanner that produces more than 4,700 ppi. And at that, they want \$25 to scan a B&W 35mm negative at that resolution. I do have a place that is printing for me on the new Minolta printer at approx.

\$10/sq.ft. - will report in the next couple of days. But scanning is still the problem for us here on the LA to SF Overland Stage route.

- 1) Where does one find 45,000ppi scanners?
- 2) What would be the cost of having a Minox negative scan made?
- 3) What is the practical upper ppi limit for scanning that I could afford?
- 4) What pixel count do I need for the various printers (IRIS, etc.) to achieve the quality that Pete saw in the 30x40 prints?
- 5) What is the cost (per square foot) for prints like the ones Pete saw?

Don

Source: AOL

Bessler 23CII (Wed, 7 Oct 1998 16:59:50 -0700)

I have just enlarged a Minox negative with my "new" Bessler 23CII and Dual Dichro color head. I was going to sell my Omega B-22XL, but am not sure now. The Bessler appears to be MUCH less efficient and the conversion from small negatives to large appears to be daunting.

I THINK I need HELP! Probably best OFF LINE please!

Don

Source: AOL

Printing (Wed, 9 Jul 1997 10:50:44 -0700)

Hi Al,

Thanks for the kind words. You have been at this for a long time and have seen a lot of great work, so I truly appreciate your comments. I really don't know how to elaborate on the process, other than to recommend treating a Minox negative with the same TLC as a negative from a Hasselblad or Deardorff. The same quality should be obtainable from

the Minox negative, just smaller sized prints. I really don't know what to say that Ansel or Fred Picker have not already said.

Don

Source: AOL

Re: Tech Pan speed, more on (Wed, 9 Jul 1997 15:49:04 -0700)

I guess this is as good a time as any to raise the issue of the impact of the diffraction limit of sharpness.

For an 8x10 inch print at an enlargement factor of 25.4 -

A 15mm lens at f/3.5 has a
hyperfocal distance of 21.4 feet and a
depth of field from 10.7' to infinity
blue light enlargement factor limit for 100 lines/inch = 318
red light enlargement factor limit for 100 lines/inch = 181

A 15mm lens at f/13 has a
hyperfocal distance of 5.8 feet and a
depth of field from 2.9' to infinity
blue light enlargement factor limit for 100 lines/inch = 49
red light enlargement factor limit for 100 lines/inch = 28

It looks to me like an 8x10 inch print falls within the limits for even f/13. BUT the question I really have is:

I can see an out of focus element in the print when it falls outside of the depth of field limit. Is the visual effect of exceeding the diffraction limit as noticeable? I know I have spent a considerable amount of time and press to the subject, but is it as critical as depth of field?

Don

Source: AOL

The Don Krehbiel Archive

Writings - Gallery - Messages - Website

Discover the enduring legacy of Don Krehbiel, one of the most respected voices in the world of subminiature photography. This archive brings together Don's insightful writings, engaging correspondence, and thoughtful commentary on Minox cameras and small-format photography.

Inside, you'll find a collection of his technical advice, practical tips, and personal reflections - preserved by the community that continues to celebrate his work. Also included are selections from the Submini-L mailing list, an early online gathering place for enthusiasts, alongside a growing gallery and web archive.

A testament to Don's curiosity, generosity, and dedication to the craft, this volume is an essential resource for Minox users, collectors, and anyone intrigued by the world of subminiature cameras.

Published by Submini-L and the Minox Historical Society

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