Editor: Al Doyle Subscription: \$16 Per Year \$23 Per Year International

THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 443-3409

Supporting 110, 17.5em, 18em, 18em,

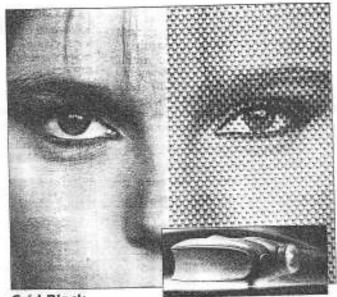
ETCHED LENS IMPROVES LOW LIGHT PERFORMANCE

Hobbyists who rely on trickle down technology for the latest in pocketable photographic equipment can look for a new wrinkle in ultraminiature optics.

Hughes Aircraft Co. reduced the number of glass elements in thermal sights using a technique called Binary Optics.

The lens is ground in digital steps rather than the smooth analog curve of other lenses. The face of the lens looks rippled, as if a series of concentric circles were etched into it. The result is a 40% reduction in the number of elements, which makes the lenses lighter and less expensive while improving image quality.

A Hughes compact IR sensor small enough to fit in the palm of a hand, has a 128 x 128 detector focal plane array, and operates in mid wavelength IR, 3-5 microns.

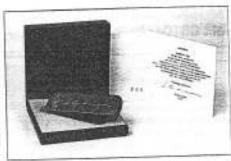


Grid-Block

If "depixelization" sounds like Pentagon jargon, you're close. It's yet another bit of military-inspired tech applied to consumer gear, in this case through Projectavision's patented method of removing the grid-like pattern from LCD (liquid crystal display) projection TV. The goal: a silde-carousel-size video projector that throws a big, super-bright image with no special screen and costs less than \$1000. The first prototype comes from the MGM brand of Talwan's CMC Magnetics. Japan's Matsushita, parent of Panasonic, has a license, too.







"PHOTO Deal" is an excellent German magazine for camera collectors and specialists. Beginning this year the International Edition includes English language translations.

Items that caught our attention in issue III/95 (that's Roman numeral 3, covering the months of July, August, September): An illustrated review of the Tessina, a classified ad from the 1st German Minox Club, and news of a limited edition wooden Minox produced to commemorate the 60th anniversary of the camera

"PHOTO Deal", c/o Rudolf Hillebrand, Kiefernweg 21, 41470 Neuss, Germany.



HELPLINE

NOVICE ALCHEMIST Eastman Kodak's "Customer Service Pamphlets* were a trove of valuable information for submini darkroom workers. Pamphlet #AE-31 has been discontinued. Here's a copy for your files. Have fun!

DON'T NEED TO OWN IT Rent 'hat cameras', belly pack recorders, transmitters. etc. Day rates. Head Trip. Vail, Co. (970) 827-4288.

NEEDS PANORAMA A reuseable Pano with 2 element f/11. thumbwheel advance for \$20. is at Value Fair. Bx 35605. Wallingford CT. 06492.

PENTAXER The flash/winder combo is not pocketable.



"STILLS" THAT MOVE

icoh has stretched the meaning of "still" with a digital camera that records and plays back a limited amount of moving images complete with sound.

The DC-1 records as many as 492 still images or four full-motion scenes with about five seconds of audio each on an SMB PC card. Sound, in the form of audio captions, can be used with the still photos. The data can then be transferred to a personal computer and saved and manipulated in standard multimedia formats. The camera's content can be played back on a TV as well. Stills or a group of frames from the motion sequence can be output to a video printer.

At a demonstration in Tokyo, I had a chance to put my hands on the DC-1. Without the monitor attached, the 5.3- by 0.9- by 3-inch, 9-ounce camera slipped into my pocket. The imagecapturing and voice-annotation functions were easy to operate and the printed photos were of acceptable snapshot quality. The big advantage will be in coupling the DC-1 with the capabilities of a personal computer. The resolution of an image captured by the DC-I is 380,000 pixels-more than a 640- by 480-pixel screen.

The DC-1 is already on sale in Japan for the equivalent of about \$1,600.

PRINTING COLOR FILMS DEVELOPED AS **BLACK-AND-WHITE** AE-31

When Kodak color films have been mistakenly processed as blackand-white, there are several ways you can salvage pictures from them. You can obtain black-and-white prints from your films, or you can obtain color prints or color slides from them texcept KODACHROME Films) by following the procedures described in this pamphlet.

These prints or slides would not be acceptable compared with those from color films which have been processed correctly. But the salvaged prints should certainly be of value especially when you can't take the pictures over again.

BLACK-AND-WHITE PRINTS

When Kodak color films are processed accidentally as black-andwhite, they usually have an overall yellow or orange stain along with a black-and-white image. Use the following procedures to obtain black-and-white prints.

KODACOLOR, KODAK EKTACOLOR Professional, and KODAK VERICOLOR II Professional Films: The stain in the negatives from these films is reddish orange and is similar to the overall reddishorange color of negatives when the films are properly processed as color negatives. Therefore, you can make black-and-white prints from these films without giving the negatives special treatment. You can use fast papers such as KODABROMIDE and KODAK MEDALIST Papers, but Kodas Panalure Paper, or equivalent, is better for this purpose. Panalure Paper was designed for making black-andwhite prints from color negatives, so exposures will be much shorter on PANALURE Paper than on conventional papers because of the reddish-orange stain in the negatives.





Tessina

WORLD'S SMALLEST



The pocket camera for everyone uses 35 mm film yet is smaller than a pack of cig-



arettes or any 16 mm camera, has automatic motor advance, t/2.84/22 lens, speeds of ½ to 1/500, reflex focusing to 9", MXF synch., produces 2 x 2 slides and huge prints up to 20 x 24" and beyond.

A technical miracle of Swiss precision \$169.00

KARL HEITZ, INC.

400 LEXINGTON AVENUE, NEW YORK 17, N. Y. TUKON 6-4920 Please write for TESSINA Color Catalog PT-6 Submitted by S. Kessler The procedures described here for salvaging pictures in color are not recommended for Kodachrome Films. Only black-and-white prints can be made from Kodachrome Films which have been misprocessed as black-and-white.

When you want color pictures from your films, do not use the procedures for removing stain that were described on pages 2 and 3 for making black-and-white prints.

Before you reprocess your negatives to obtain color, it's a good idea to make the best possible black-and-white prints for "insurance." Because of the yellow or orange stain in the negatives, make your "insurance" prints on Panalure Paper. Otherwise, the exposure time would be excessively long on conventional black-and-white papers.

To reprocess Kodacolor-X, Ektacolor Professional, Ektachrome-X, High Speed Ektachrome, and Ektachrome Professional Films, use the following procedure. For reprocessing Kodacolor II and Kodak Vericolor II Professional Films, note the exception in step 5. You can carry out all the steps in normal room light.

- 1. Wash 15 minutes at 73 77°F (23 25°C).
- 2. Bleach in KODAK Bleach, Process C-22-8 minutes at 73-77°F.

CAUTION: The bleach must be free of hypo. If in doubt, use a fresh bleach solution.

- 3. Wash 15 minutes at 73 77° F.
- 4. Expose to the light from a No. 2 photoflood lamp at a distance of 1 foot (.3 m) for 15 seconds on each side. Even though the preceding steps were done in room light, the exposure may have been uneven.

WARNING: A lighted photoflood lamp becomes quite hot and will shatter if you allow any liquid to splash on its surface. Place sheets of glass where they will protect the lamp from spattering or splashing of the solutions or the wash water.

 Develop in Kodak Liquid Developer, Process C-22—12 minutes at 75 ± 1 2°F and complete the remaining steps in the instructions that come with the Kodak Color Processing Kit, Process C-22. (For Kodacolor II and Vericolor Films, process normally in Kodak Flexicolor Chemicals, Process C-41).

Now that you have reprocessed your films as color negatives, you can make color prints on Kodak Ektacolor 37 RC Paper or color slides on Kodak Ektacolor Slide Film 5028 The to iniques for making color prints or slides from color negatives are described in detail in the Kodak book Printing Color Negatives (E-66), \$2.50. Additional information on making color slides from connegatives is provided in the Kodak book Planning and Producing and Programs 5-30, \$3.25.

HELPLINE

Al, Warn everyone! Microtec (Fairborn, DH) is NOT shipping merchandise. Paul Booth, NY, NY

2. Prepare Kodak Bleach Bath SR-26.

Water Hydrogen Peroxide (30%) Sulfuric Acid (7%)	97 fl oz			3.1
	13 fl oz			400 ml
	18 fl oz	1	35	560 ml

WARNING: Always add the sulfuric acid to the solution slowly, stirring constantly. Never add the water or solution to the acid.

- Place the film in the prehardener bath at 75 80°F for 5 minutes. Agitate every 30 seconds.
- 4. Wash in running water at 75 80°F for 5 minutes.
- Immerse the film in the bleach bath at 75'-80°F for 4 minutes. Agitate every 30 seconds. This step can be repeated if removal of the stain is not sufficient.
- 6. Wash in running water at 75 80°F for 5 minutes.
- Remove water droplets with a soft, viscose sponge or treat the tilm with KODAK PHOTO-FLO Solution, prepared as directed on the label, for 1 minute.

Print the negative as you would any normal black-and-white negative.

WARNING: Avoid unnecessary or prolonged skin contact with the prehardener or the bleach. Use rubber gloves, In case of accidental skin or eye contact, flush the affected area with plenty of water immediately. Contact with the liquid or vapor of the prehardener can cause skin and eye irritation. Provide adequate ventilation. Keep tanks covered when you aren't using them.

COLOR PRINTS OR COLOR SLIDES

If you want color prints or color slides from your films (except KODACHROME Films), you can bleach and process the negatives to obtain color negatives. In many cases, this procedure will restore reasonable color images to the negatives so that color prints or slides can be made from them.

It's impossible to predict whether the color pictures you obtain will be acceptable. There is an infinite number of black-and-white developers and process conditions which would have a direct effect on the final results. However, the color prints or slides that have been salvaged with this emergency procedure should have more value than black-and-white prints from the same negatives.

See in the dark.

The White Night¹⁰⁰ One of the best night vision scopes ever available. In famous compact size and wide-optic power turns night into green-boad day instantly. Measures just 7x3x2°, with magnification of 8.2x.

Excellent for surveillance, nature study, or home/business protection.
Best of all, the political changes in the former U.S.S.R. have driven Check out this price! Complete with

exchange rates to an all-time low. Check out this price! Complete with carrying case, straps, and a lifetime warranty.

■ White Night[™] Scope #WN-37 \$495.00 Super efficient, requires just 2 AA batteries - not included.





Lint inside the camera can produce a half-moon shape.

Half-Moon over Miami

Many of my recent slides include halfmoon shapes along the edge of the frame (see above). The half-moons appear regardless of which lens I use, but not always on consecutive frames. What causes this problem?

Rick Poley, Miami, FL.

The shadowy intruder on your slides is probably caused by a piece of lint that has taken up residence inside your camera. Look for the offending wisp lodged along the shutter track, and use tweezers or a small camel's-hair brush to remove it. Avoid using a direct blast from a can of compressed air, as the high gas pressure might damage delicate shutter blades.



MJS ENTERPRISES

MJS Enterprises, the makers of many popular tools for making a hobbyist's job that much easier, have created a Mini Drill that modelers will love. The Mini Drill is perfect for tiny drilling and features 12 small drills that are stored in the nandle and are held firmly in the collet for accurate pinpoint drilling. The Mini Drill has many uses, including crafts, toys, miniatures, frames, and much, much more. Turn to MJS Enterprises for your hobby tool needs.

MJS ENTERPRISES, P.O. Box 6292, Lancaster, PA 17603. KODACHROME and KODAK EKTACHROME Films: When KODACHROME Film is processed as black-and-white, the black rem-jet backing may not have been removed. To remove the rem-jet backing, swab the film with cotton dipped in a mild alkadine solution—a 5-percent solution of sodium carbonate will do the job. Try to keep this solution off the emulsion side of the film. Rinse the film to remove the sodium carbonate.

You can make prints on Panalure Paper (see page 4), but if you remove the yellow or orange stain from these misprocessed films, you can print the negatives on conventional black-and-white paper the same as you would any normal black-and-white negatives. Do not remove the stain from Ektachrome Films if you plan to reprocess them as color negatives (see page 4).

To remove the stain from KODACHROME and KODAK EKTACHROME Films (except High Speed EKTACHROME Film):

- Prepare the bleach bath by dissolving I ounce (28 g) of Kodak Citric Acid (Anhydrous)* in I gallon (4 l) of Kodak Rapid Fixer diluted as recommended for films in the fixer instructions.
- Handle only one negative at a time. Treat the negative in KODAK PHOTO-FLO Solution at 75 - 80°F (24 - 26.5°C)† for 1 minute. Use fresh solution prepared as directed on the label.
- Rinse in water at 75 80°F for 20 seconds.
- Immerse in the bleach bath (prepared in Stop 1) at 75 80°F for 7 to 14 minutes.

Important: Stop bleaching if reduction of the silver image becomes apparent. It is better to leave a little stain than to lose the silver image.

 Wash the negative thoroughly in running water at 75 - 80°F for 10 minutes.

 Remove water droplets with a soft, viscose sponge, or treat the film with KODAK PHOTO-FLO Solution for 1 minute. Dry the negative.

-Print the negative as you would any normal black-and-white negative.

To remove the stain from KODAK High Speed EKTACHROME Film:

1. Prepare Kodak Prehardener Bath PB-5.

	U.S. Liquid or Avoirdupois	Metric
Water Formaldehyde, about 37%	64 fl oz	2.1
solution by weight	4 fl oz	120 ml
Kodak Borax (Decahydrated)	514 oz	160 g
Water to make	1 gal	41

De Rigueur Rig For Rich Spies!

Pushing aside my chimney glass of Louis XIII cognac, and musing on the miscalculations of the KGB's Maksutov in the Düsseldorf affair (a spectacular waste of malossol caviar, it's true, but it did clog up the bugging devices quite satisfactorily), I was suddenly plunged into a deep melancholy.

As I looked around at my collection of gold cameras—the glimmering Leicas, Rolleis, and Hasselblads that filled my digs with an ineffable glow—I felt somehow incomplete, unfinished. Over the years, I had deliberately avoided accumulating keepsakes of my youthful dabblings in espionage, and yet now. . .

Then, as I aimlessly fanned the pages of POPULAR PHOTOGRAPHY, there it was: the Minox LX Platin! It was much like the one with which



Minox LX Platin: For spies who come in from the gold, a platinumplated subminiature.

I had hastily photographed plans for the Kalachnikov coffee grinder (the 9-mm slug fragments in my gluteus maximus twinged at the very memory). This Minox, however, was made of solid brass, plated in gold, and then finished in platinum (there is something smarmily déclassé about gold plating, don't you think?). Then it was packed in a hardwood case good show.

And the price clinched it—a mere \$3,500 or so at retail. I resolved, next time I sent Gromek out in the Armstrong-Siddeley for pepperoni pizza, to pick up one at Nouveau Fiche Camera Store. Then again, I'll have him get two. They are, after all, only making a thousand of them.

THE GREAT SPY MOVIE FAN CLUB

Movie — The Conversation
 ★★★ ('74) Gene Hackman,
 John Cazale. A surveillance expert
 lets his conscience interfere with
 his work. Directed by Francis Ford
 Coppote. 4336148

"THE CONVERSATION" Hackman loses it big time with a warehouse full of high tech goodies. Proving he who has most toys goes nuts:

^{*}The products suggested here have been tested in Kodak laboratories. Exact equivalents of these products can also be used.

For each in reading, the Celsius equivalent is given once per l'ahrenheit value.

ENTRY LEVEL



3-Pack 110 Film & Camera

Walgreens; 72-exp. 110 color print film with FREE 110 micro camera.

HELPLINE

ROLLEI-16 OWNER if you bought a camera from OLDEN, in NYC, you probably got a good deal on the price, but the camera's distance scale reads in meters, not feet. Of course they should tell us in advance, but that's OLDEN! Not to worry. Here's a little sticker sized to fit under the scale.

Make a copy, attach to camera with clear adhesive tape.

CAMERA SHOWS / KAMARABORSEN

- Sept. 16 Kiel/Legiensall Legienstr. 22
 - 17 Hamburg/Curio-Haus Rothenbaumchaussee 13
 - 23 Bonn/Bruckenforum Beul Kennedybrucke
 - 24 Hannover/Wulfeler Brauerei-Gaststatten Heldesheimer Str. 380
- 30-10/1 Photographic Collectors of Houston Camera Show Holiday Inn Hobby, (713) 868-9606

LETTERS

Tessina Users:

Karl Heitz had several rolls of outdated Kodak Panatomic-X selling at about 1/2 reg price. Cassettes are reuseable. Considering that some people are asking as much as \$25 ea., this seemed like a good buy. Ask for Loretta (718) 565-0604.

> Larry Rees, Folsom, CA.

Dear Al-

I have some items available that may interest subscribers;

(2) Kodak Pocket Carousel Model 200 Slide Projectors in Kodak clamahell cases w/slide tray & IB, These are remote control focus & slide change.

(2) Kodak clamshell slide tray cases w/2 slide trays in each.

These projectors are UNUSED (cannot call them "new" since I so longer have boxes & packing.) and I'll sell each package of projector, 2 cases & 3 trays for \$150.00 or trade for Minox stuff.

Also have an EMAHEAD for Maniya-16 and other miniature cameras, consisting of a condenser, focusing mount, film carrier and 25mm f/3.5 lens all in a screw mount to use your chlarger as the light source. Will handle 10x14 mm mags on 16mm film. Condition MINT - in box with inst. for \$50.00 or trade for Minox stuff.

Please add 10% for domestic UPS ship/ina.

I thought I'd offer these to Subminiature Times subscribers first, before I put them in Camera Shopper.

Thanks,

Jim Bletch 4004 Madison St. Hyattsville, MD 20781-1751

(301) 927-9424 9 AM - 9 PM EDT

R. TAYLOR, of Kingston, Jamaica, and others seeking a high quality submini for left handed photographers; the Yashica Samurai has left and right hand models. I'm sending you some spec' sheets and test reports. Will publish if there is interest. Al D.



SAMURAI
Special
Purchase
17495

A Dreakthrough of Unbellevable Dimensions

• Unique vertically staped design for one-handed operation • High-speed 3X power zoon liers for wide angle to telephoto • "Double 35mm" format for swice the number of shots per roll • Automatic encrything auto-boud, acto-expansive, auto-flash, auto-load, advance, rowind and auto-date.

LETT- HAND TYPE \$299.00
Samural Accessories
For Original Samural
Action Grip SM-G1 \$10.00
Portrait Flash Adapter SM-S1 \$114.50
For Samural AX:
WL-1 (0.8c) Wide Converter 145.00
TL-1 (1.4x) Tele Converter 346.00
CL-1 Close-Up Lane \$30.00

SAMURAI

1/2 Frame SLR

ADORAMA 1 (800) 223-2500 CENTRAL CAMERA 1 (800) 421-1899

QUICKFINDER 9/95

EDICTIONARY - BOOK CAMERA - Next 110 camera disquised as "Webster" pocket distinary. Complete with aliphoses and instruction sheet MINT \$ 74.95 |
The quiet your continuous requests for SM cassettes, here's our complete inventory!! All outdated, NO GURMANTER!!

A-MINON 9.5mm -METAL CONT.SEALED, EARLY, W/LOGO (2 cass.) MINT \$ 7.50 ms. B " - COCCREGE CAMEROARD, (2 cass.) BOXES 5 5.00 ms. SACES C" - LATE (1 cass.) BOXES 5 5.00 ms. D-YASHICA " INTORON, CARREADED, (2 cass.) BOXES 5 5.00 ms. P- 1.005E CARREADED, (2 cass.) BOXES 5 5.00 ms. P- 1.005E CARREADED, (2 cass.) BOXES 5 5.00 ms. P- 1.005E CARREADED, (3 cass.) BOXES 5 4.75 ms. B-COMPASS - VERY CLD, SINGLE-SHOT HOLDERS, LOADED but SHELF WORN. BARE!! \$ 19.95 ms.

Robert G. Pins Inc. 10 John Circle - P.O. Box 406 - Norwood, N.J. (1784)

Telephone: (201) 784-1446 (201) 767-3619 FAX: Deytine USA (201) 784-2040 Nghi USA (201) 767-0328