

# THE SUBMINIATURE TIMES

The Subminiature Times is published monthly by Doylejet, P.O. Box 60311, Houston, TX. 77205 (713) 443-3409  
Supporting 110, 17.5mm, 16mm, 9.5mm, 8mm, 4mm, 1mm, Microdot, and Electronic Still Photography.



## WALKING STUCK

Owners of recently purchased Ben Akiba walking stick cameras may find that their four figure collectibles are modern copies weathered to look 90 years old.

The original was patented by Emil Kronke in 1902. Variations made by A. Lehmann of Berlin, which were exported as the Ben Akiba Cane Camera, made twenty 13mm x 25mm exposures on 18mm roll film.

The handles hold three or four spare rolls. The shutter releases were buttons, tabs, or triggers. The copies work fine, and command heady prices even as copies.

Since the originals are best left in your showcase, should you discover that your camera is a modern clone, load fresh film and take some pictures.



HITACHI KPMI 16mm B&W CCD Machine Vision Camera offers six new configurations. Most popular is the extended mini head. The KPMI specification offers 570 lines of resolution, pixel 758 (H) x 493 (V), adjustable shutter, field/frame, gain AGC, gama on/off, all externally switchable. Prices starting at \$595.



SUPPLIES of new 110 cameras are unpredictable as local retailers clear out '92 stock this month. The Vivitars are available at Wal-Mart and Walgreens. Prices approximately \$11.99.

THE LIST of subminiature cameras on page 2 was compiled in 1978 by Bob Johnson, of Cos Cob, CT. It was part of a four part article entitled "Subminiature Camera Collecting" submitted by Morris G. Moses, of Albany, NY.

Update your list by including...17.5mm: Penletto. 16mm: Rollei, and Minicord. 110: Voigtlander Vitoret, Pentax, and Rollei. Binoculars: Tasco 7800 and 7900. Submersibles: Minolta Weathermatic-A, and Wet10. 9.5mm Chadt, Slimax-Lite, Minox models LX, and EC. 8mm: Okada Camera 'A'.

## SUBMINIATURES

## MINIATURE CONVENTIONAL-TYPE CAMERA

German: Goldbeck 16  
Jolly  
Junka, Juka  
Kalos  
Ompex  
Petie  
Petitax  
Petitax IV  
Photolet  
Sida (Extra)  
Tuxi  
Tuximat (sel. mtr.)  
Wilca

Japan: Beauty 14 (TKK)  
Beauty 16 (TKK)  
Bell 14  
Bounty  
Epochs (TKK)  
Gamma  
Global II  
Jem II 16  
Kiku 16 II  
Lloyd  
Meteor (TKK)  
Midget (1937)  
Mighty (+ reflex)  
Myero 16 I, II, III  
Myero Super 16  
Myracle Micro 16 IIIA  
New Midget I, II, III  
Rubina 16  
Rubix 16 (TKK)  
Snappy (Konica)  
Spy 16 (TKK)  
Tacker  
Tone (+ reflex)  
Toyoca 16  
Vesta (+ reflex)  
Vestkam (TKK)

USA: Custom Pixie  
Flash Pixie  
Pixie  
Ulca (+ chrome?)

Other: Luxia (Ital.)  
Guzzi

## LOW-COST SUBMINIS\*

Japan: Arcoflex  
Arrow  
Betca  
Blue Star  
Charmy  
Click  
CMA  
CMC  
Colly  
Crown  
Crustar  
Dale  
Diplomat  
Emson  
Global  
Hamco  
Happy  
Hit, Kent  
Midge  
Minetta  
Old Mexico

Peace  
QP  
Regent  
Satellite  
Shalco  
Speedex  
Star-Lite  
Sterling  
Swallow  
Toyoca  
Traveler

## OTHER CAMERA-TYPE SHAPES

T.L.R.: Babyflex (Sholy-flex)  
Gemflex  
Goert Minicord I, II, III, IV  
S.L.R.: Mecaflex  
Narciss (USSR)  
Movie-Type: Albert 16  
Bolsey 8  
Bolsey Uniset (also Swiss mod.)  
Compendica  
Darling 16  
Duca  
Frica  
Kirm 16  
Mascot  
Mundus  
Mundus Color (Eccno and TB8/20)  
Poppy  
Scat (Ital.)  
Sola  
Tynar  
Universal Minute 16

Panoram: Viscawide 16

Stereo: Linex  
Stereo Mikroma I, II  
Stereophot  
Stereo 16 (Minolta/Konan)

## RECTANGULAR BOX AND BOX WITH LENS

35mm (includes conventional types and other film widths near 35mm):  
Boltax  
Boltavit  
Dan 35  
Dan 35 III  
Ducati (r.f. and non-r.f.)  
Elly (several versions)  
Ensign Midlet (several versions)  
No. 1 Ensignette  
(regular and presentation)  
Norton  
Pax  
Photovit (2 versions)  
Rapitake (black, brown)  
Start 35  
Start K II 35  
Tessina, Tessina L  
Tex  
Univex (2 versions)  
Univex AF (AF-AF5, G.S., + colors)

9.5mm: Fotal  
Minox I, II, III, IIIS  
Minox B, BL, C  
Okada Camera "A"  
Ultima  
Yashica Atoton  
Yashica Aton Electro (also "T")

16mm:

Revue Mini-star  
Bera (or Vega)  
Edixa 16 (+ sel. mtr.)  
Expo Police  
Gami  
Golden Ricoh  
Golden Steky  
Hollow  
Mamiya 16  
Mamiya Super 16 (or Tower 16), II, III  
Mamiya Automatic 16  
Mamiya 16 Deluxe  
Mamiya 16 EE Deluxe  
Konan Automat  
Mec 16 and 16SB  
Mikroma I and II and Police Model  
Miniflex (several models)  
Minolta 16 and 16II  
(chrome, red, blue, green, gold)  
Minolta 16E, EE and EEII  
Minolta MG, MGS, QT  
Minolta 16P and PS  
Parvo (Ital.)  
Roller 16 and 16S (3 coverings)  
Sfomax  
Steky (also II, III, IIIB)  
Top (also II)  
Whittaker Micro 16  
Yashica Y16  
Yashica 16EE  
Ricoch 16

## DISGUISED OR NON-CAMERA SHAPES

Binoculars: Binoca (white, red)  
Caminox A, B, C  
Orinox  
Teleca

Lighter: Camera Lighter (2 versions)  
Echo 8 (or Europeo 8) (2 versions)  
Petal Lighter Camera

Matchbox: Kodak WWII Spy Camera  
French Espionage Camera

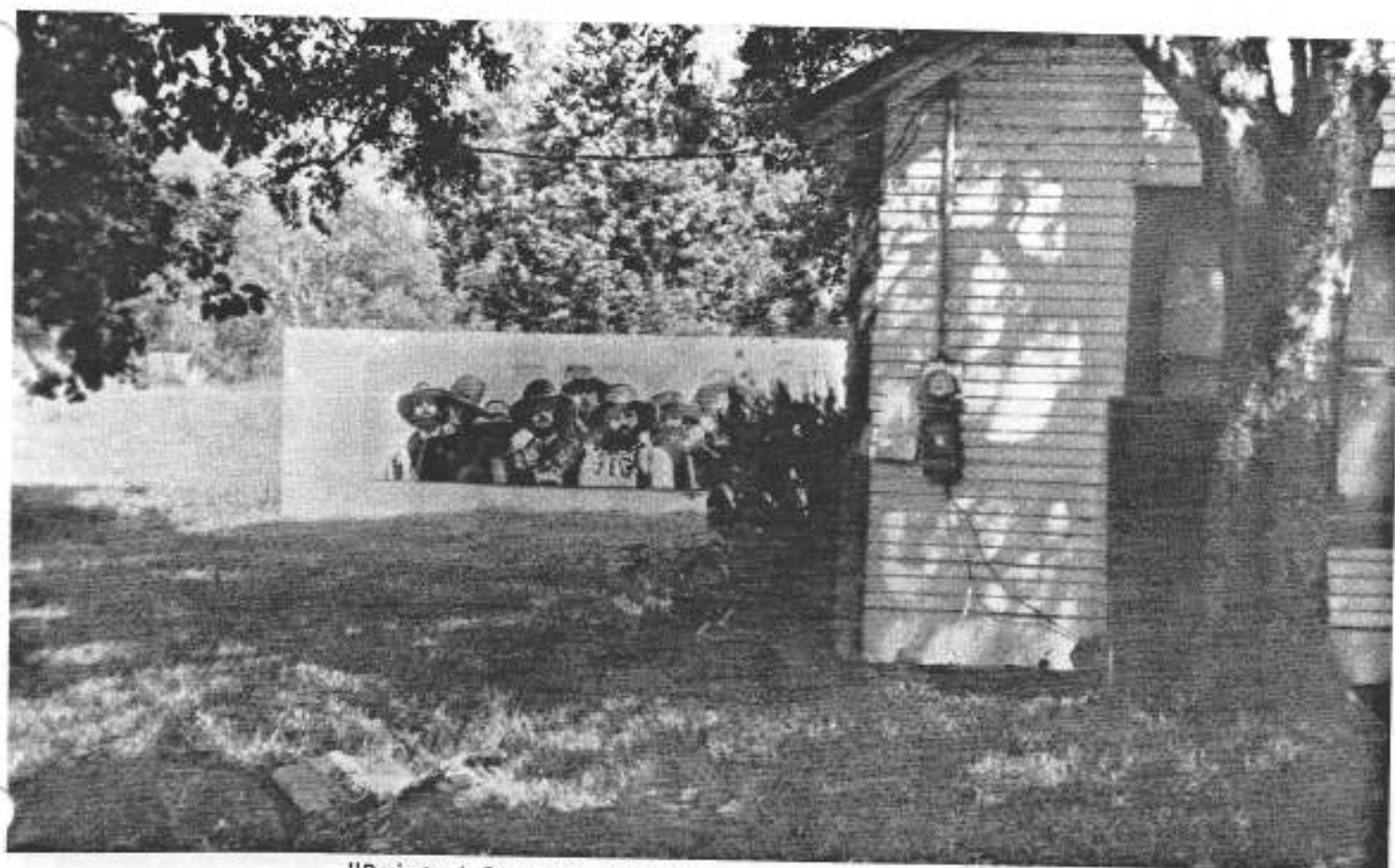
Pen: Septon  
Stylophot Std. and Deluxe

Pistol: Doryu-2  
Erac  
Gemmy  
Mamiya

Radio: Air King  
Ramera (or Bell Kamra)  
(black, red, white)  
Tom Thumb

Timepiece: Expo (1904 and 1910)  
Magic Photoret  
Petal (round and hexagon)  
Steinbeck A.B.C.  
Ticka  
(also Watch Face and Focal Plane mod.)

Misc.: ASR Fotodisc  
Carmen  
Compass  
Coronet Midget  
(black, brown, green, red, blue)  
Kombi  
L'aiglon  
Parker Miniature  
Presto  
Steinheil  
XYZ



"Painted Country Fence"

AL Doyle

Camera: Minolta-16 MG

Film: Fuji HS-U

Developer: Rodinal 1:500

#### ALCHEMY: RODINAL 1:200 - 1:500

Extreme dilutions of Agfa Rodinal developer tend to be eye-popping numbers to photographers who work with other developers, and consider anything thinner than 1:15 drinkable.

A typical argument against ultra dilution is that with a slower film you'd get finer grain at a reasonable developing time. It's a good argument because 1:500 dilutions can take up to an hour depending upon the film.

The only counter is that if you use it differently, you get spectacular acutance and tonality, plus the film speed.

In a recent phone call, Mr. R. Marks, of Dallas, TX. described his film developing technique.

"I process ISO 100 films using Rodinal 1:200 with normal agitation @ 75°F. After 16 minutes I add more water to make it a 1:500 dilution with no agitation for ten minutes."

This type of developing is variously called stand developing or development to finality. The names almost explain what's taking place in the tank. Thinned Rodinal is closer to a water bath than thinned HC-110 (which could develop another roll if necessary.)

It would also be different if you poured out the 1:200 solution, then poured in a 1:500 solution without agitation. You'd risk 'veils' patches of unequal density, or streaks.

A 1:500 solution of used Rodinal is on its last legs. Highlights remain literally untouched while edge sharpness is exaggerated. The basic granularity does not change, but an artificial shoulder or Mackie line is formed around every image point. Notice that the top branch of the tree behind the fence is clearly defined. For a better example see also page 6 of issue #48.

Dear Al,  
Have you tried to process a film disc?

Carl Pearson  
Watertown, MA

Dear Carl,

I hope you don't mean a cartridge from a disc camera. I've never used the format.

To process the film disc in a PK 420 watch camera or GF '81 ring it helps to start with an eyedropper and 1-ounce graduate.

I like to improvise before buying a lot of equipment. Especially something that will be rarely used. Fig. 1 shows two homemade disc developing tanks, one a shot glass, the other a 35mm film can, with sharpened pencil 'spools' epoxied to the bases. Apply two coats of varnish, or model airplane dope to the pencil, and sand the end flat before mounting it.

Measure 1 fluid ounce in the graduate, then calibrate your 'tank'. Make a solution of developer sufficient to cover the pencil point. A 1:100 solution of Agfa Rodinal is 5 drops in an ounce of water. For smaller amounts I estimate 500 drops = 1 ounce and work accordingly.



In total darkness place the disc film on the pencil point, emulsion side down (smooth side up).

If you place a cup over the glass and a thick towel over the cup it becomes a daylight developing tank. Agitate by swirling gently on a level surface.

Add 4ml (3/4 tsp) of any rapid fixer at the end of the developing time to turn spent developer into a monobath.

Keep your finger on the pencil when pouring out the processing chemicals. The film can be left to dry in the tank if it doesn't touch the sides. This eliminates handling.

Mount dry disks in Gepe A.N. Glass slide mounts (Catalog #6002. \$6.45 for 20 pcs.) Adorama, 42 W 18th St. NYC, NY 10011 (212)741-0052.

Or file your disks in a Perma-Saf. The top loading envelopes will hold any size watch disc, ring, dot, or individual 35mm frame.

AL D.



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## Spying with a Camera (Continued from Last month)

Some months later, he pulled his most daring exploit. Reading of the arrival of a destroyer in nearby Annapolis, he decided to steal two closely guarded manuals which he knew would be aboard. He knew the routine of such a ship while in port, and waited until mid-evening, when the captain would be ashore. He boarded the boat and then:

"I asked for the Skipper and was properly disappointed when I was told that he would not be back. After about half an hour's conversation, it developed that I was talking to the officer who handled all the confidential publications, namely, the Signal Officer.

"With the excuse that I was interested in dive bombing and also in Diesel engine development, I asked if he had the naval publication *Report of Gunnery Exercises and Report on Engine Performances*. He opened the safe, I asked to borrow them so I might read them in my room at the Carvel Hotel.

"He agreed and I signed the receipts,





after which he closed the safe and I tarried about. I was frantic to be gone, but I was casual. As soon as I got to my hotel, I telephoned the Japanese Embassy and dashed off at high speed—taking due care not to be arrested."

The documents—one covered all target practice records conducted by all ships, the other contained complete engineering performance records for all vessels of the United States Navy—covered hundreds of finely printed pages. It would have taken weeks to copy them by hand—but by resorting to photography, Farnsworth and his co-plotters were able to copy the data in a secret Japanese laboratory in Washington in a single day. Then he returned the manuals and had the receipts destroyed.

The Japs gave him a bonus for this, and well they might. Before the World War, the British claimed a major triumph when they obtained clues to the target records of a few German ships. But here was a spy who had walked off with the complete target records of all American ships, plus other valuable information.

Farnsworth continued to dupe the Navy into handing him secret documents, which were copied and forwarded to Tokyo. He quarreled with the Japs eventually and finally, in an alcoholic daze, spilled his story. He was arrested and Assistant District Attorney Samuel Beach said that all details of the Farnsworth story were verified, in preparation for the trial that did not come off.

Here was a case where a single, nervy snooker became a sort of master spy—and a menace to national safety—because he knew and used photography.

Sometimes spies are able to photograph documents which never leave the hands of those to whom they have been entrusted. American authorities remember such a case in one of our embassies abroad. It was one of the many instances where a trick camera was used very successfully.

An attaché had poor vision and moved his desk close to a window to take advantage of the outside light. He was in the habit of sitting with his back to the window, holding the papers he was reading. He sometimes received secret reports on a special matter and took them to his desk to study. He noticed that a certain window-washer always appeared at such a time. He became suspicious and one day sent the workman off on a ruse. He inspected the man's water bucket closely and found that it had a false bottom, in which was built a camera. A cleverly hidden opening let light through to the lens and a small cable ran from the shutter to the bucket handle. The workman's devotion to duty was explained.

Experienced American spy chasers say there is nothing far-fetched when you speak of the shapes into which spies have made their cameras. After all, they point out, a camera consists only of a lens, a shutter, and a light-proof chamber. Cameras small enough to be concealed in the palm of the hand are made commercially and sold for twenty-five cents. What couldn't a spy, with the best of lenses and equipment at his disposal, turn out? Our service officers have seen cameras which were built in watches, with the lens in

the stem, and which were tiny enough to rig through a buttonhole. Of course, such a camera would be only a one-shot affair and would use film not much bigger than 8 mm movie film.

There was a story a couple of years ago which told of the apprehension of an English tourist—a woman—in Germany. She had come upon the scene of some tank maneuvers "accidentally." When questioning her the officers noticed she nervously fingered a large tourist button in her lapel. Inspection showed it concealed a tiny camera.

The application of photography to espionage on a wholesale scale is a development of the last few years. Oddly enough, however, Lafayette C. Baker, one of the greatest secret agents in history, used a camera during the War Between the States to obtain a mass of information. His manner was not orthodox, according to modern standards. He carried his camera openly and used it, in fact, as an "open sesame."

Posing as an itinerant photographer, Baker operated behind the Confederate lines. He told of the wonders his camera would perform and was passed from one regiment to another as a sort of conjurer. He always lined up the officers for group pictures, pumping them while he posed them. He moved up the line until he even gained the presence of President Jefferson Davis, Vice-President A. H. Stephens, and General Beauregard. The amusing part of it all was that the camera was a second-hand affair that wouldn't have taken a picture of a coal miner's shadow on the snow.

Months went by before the officers began to get fretful because the pictures did not come. Then they threw Baker into jail in Fredericksburg, Va. He escaped to his own lines with his information—leaving the worthless camera behind him.

A somewhat similar trick was worked in 1914, just before the World War, by Anne Marie Lesser. She has been identified by some as the notorious "Madoiselle La Docteur," most dreaded and effective of women spies in that war.

Sent to France, she showed up in the Vosges and soon became a favorite of army officers who manned the vital fortifications in that area. The gay, passionate girl moved freely through the territory, visiting her friends at their posts and happily pursuing her hobby—photography. The officers had been so very kind to her, she told them, and she had made so many beautiful friendships that she was afraid to trust it all to her memory.

She wanted to make snapshots of her friends, the officers, and would they stop out in the sunshine for just a minute? Carefully she maneuvered her subjects so they stood almost—but not quite—in a line between her camera and certain guns. Then the laughing Anne Marie would pose her friends, with happy smiles on their faces, and would photograph the secret fortifications. She left for Germany with many beautiful memories, and some beautiful photographs of French secrets.

There have been almost no spy cases in

recent years in which photography has not played a large part. On the whole, the odds are overwhelmingly with the photo-spy in this international game of wits. The broad applications of the camera as an instrument of espionage are just being discovered. When the history of the current war is written, the world will no doubt find that the camera was the spy's closest ally.

With this in mind, the United States has moved to tighten up the leaks here by enacting stringent new regulations governing photography near vital military areas. The Federal Bureau of Investigation has added 150 agents to help investigate the 215 daily complaints received from suspicious citizens in this spy-jittery country.

The Federal agents admit the camera has made the spy more powerful and more effective, but they don't want the idea to get around that camera-spies can't be caught. They can and are being caught. —■

This concludes Part 1 of "Spying With a Camera" a 1940 "Popular Photography" reprint submitted by Steve Kessler, Burbank, CA.

## FREE CLASSIFIED

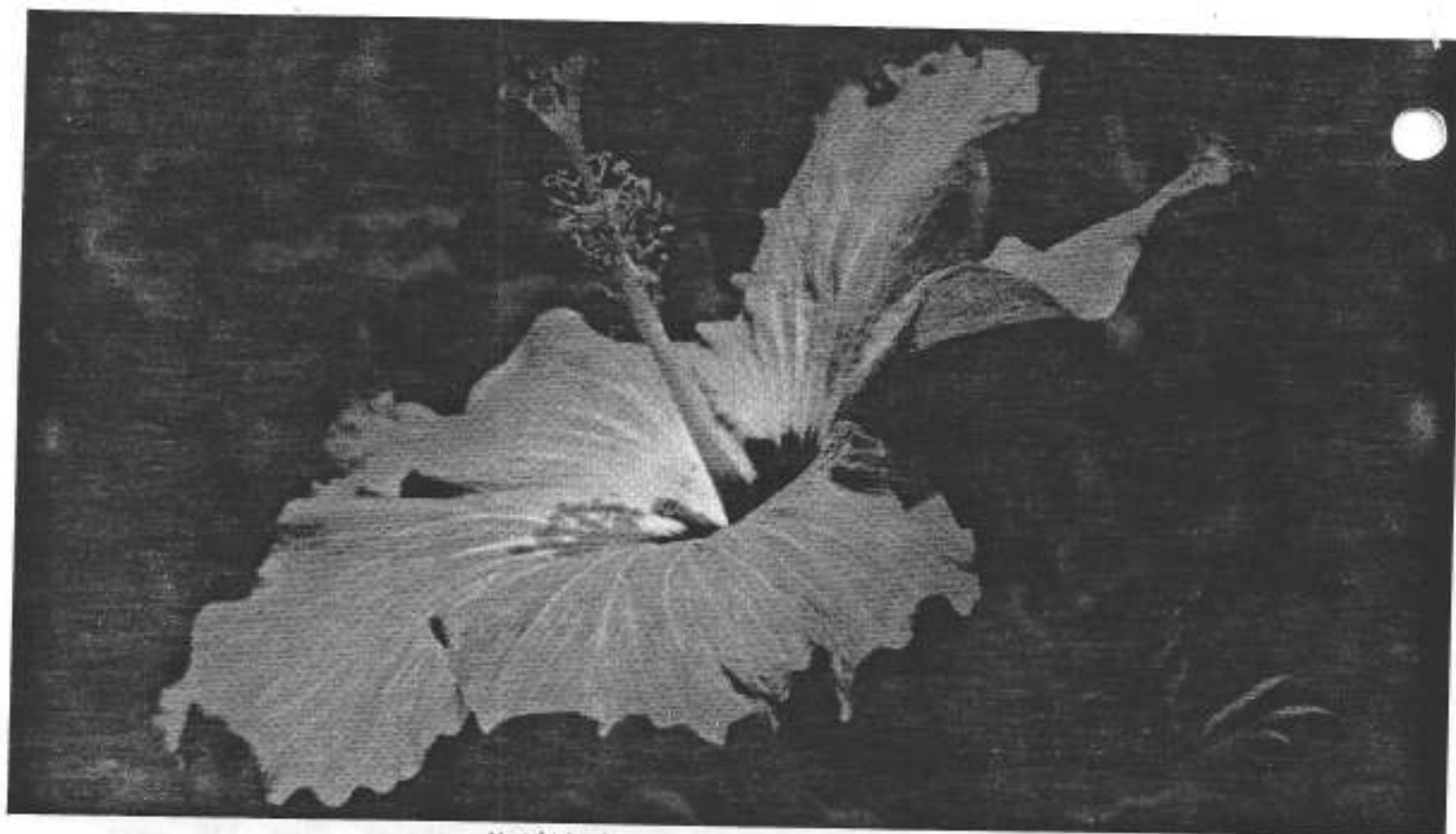
**CONFIDENTIAL** film processing. 35mm, 110, next day mailing. SASE. World of Photography, P.O. Box 2423, Morgan City, LA 70381. (504) 395-4576

## 12-bit CCD Cameras

SpectraSource Instruments has developed a series of high-speed, 12-bit camera systems, including the HPC-2 for low-light-level applications and the MCD-1200 for medical imaging. Enhanced features offer image digitization at  $3.25 \times 10^8$  pixels per second, increasing frame rates by factors of 5 or 6 over previous models. Systems can accommodate  $512 \times 512$  to  $2048 \times 2048$  imaging chips. Run time library and source code licenses are available for both versions. Options include Mac-



intosh NuBus interface, PC and SCSI systems, and the ability to employ various sensors in a single camera platform. SpectraSource Instruments, 31324 Via Colinas, Westlake Village, CA 91362.



Untitled

AL Doyle

Camera: Mamiya-16 Auto  
 Film: Kodak Recordak 7460  
 Developer: Rodinal 1:200

## THE SUBMINIATURE TIMES QUICKFINDER 1/93

Bolsey 8	\$149 B	Minox B	\$249 C	Minox IIIS	\$159 W
Golden Ricoh	449 W	2nd B	199 W	LX Black	529 W
Minolta-16 II	29 M	2nd B	169 W	Narciss SLR	795 B
-16 EEII	79 W	C	250 W	Pentax +3 lenses	269 W
-16 P	59 W	C	239 W	+3	229 W
110Z	100 W	C	200 W	+3	249 B
110Z	89 W	EC	219 W	+2	189 B
110Z	89 BC	EC	200 W	W/Strap	129 C
110Z MKII	249 BC	EC	199 A	Robot Royal	Call A
Minox 1st B	189 W	LX	429 BC	Steky III	199 A
1st B	179 W	III	149 W	Tessina	Call A
1st B	169 W	IIIS	169 W	Yashica Atoron	179 W
B Black	399 W			Yashica Atoron	100 C

- A Adorama, 42 W. 18th St., NYC, NY 10011 (212) 627-8487  
 B Brooklyn Camera Exch. 549 E. 26th St. Bklyn, NY 11210 (718) 462-2892  
 BC Bill Cametas, 253 B'way, Amityville, NY 11701 (516) 691-1190  
 C Cambridge Camera, 7th Ave, and 13th St. NYC, NY 10011 (212) 675-8600  
 M Midwest Photo, 3313 North High St., Columbus, OH. 43202 (614) 261-1264  
 W Watt St. Camera, 82 Wall St. NYC, NY 10005 (212) 344-0011

## FREE CLASSIFIED

FOR SALE Expo Subminiature Camera, with chain and lens cover, polished metal body, film cassette. Expophot Exposure meter, original box with instructions. Weston Master Universal exposure meter, Model 715. (Price negotiable) Don Allen, P.O. Box 8111, Garden City, NY 11530 (516) 481-7255.

INSTRUCTIONS WANTED Photocopy of the Manual, or your suggestions for the Mamiya-16. Super. William Cleland, 8923 Mount Bartlett Dr., Austin, TX 78759.