

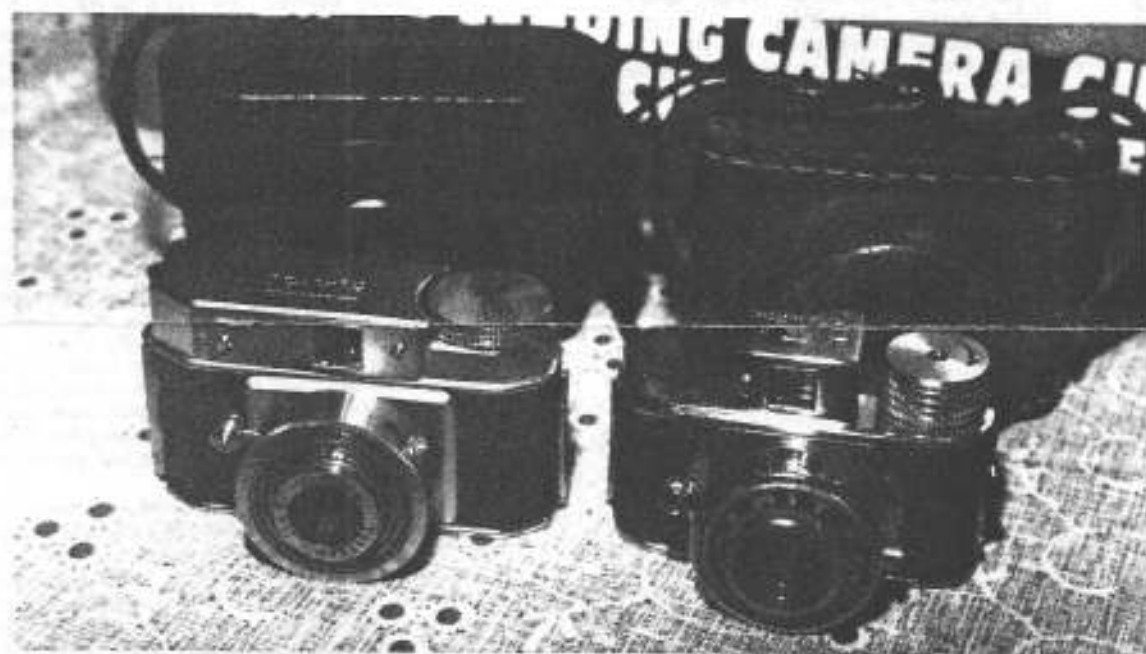
Editor: Al Doyle
Subscription: \$16 Per Year
\$23 Per Year International

#93 September 1996
Back issues \$2

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.



LETTERS

Dear Al,

I thought you would find the attached photo interesting. The Vestkam was made in occupied Japan. I paid \$20 for the Vestkam, & \$2 for the Hit.

Best regards,
Mel Gerson,
Brooklyn, NY

COLLECTOR'S ITEMS

Racing Car Wheel Camera, a fixed-focus 110, is just four-in. in diameter. Film-advance knob blends in the front, while



large shutter release is located within the tread pattern. Price, \$51.95 in the U.S., \$54.95 elsewhere, ppd. *DIST.*: Photo Historica, Ltd., P.O. Box 47, Flushing, N.Y. 11354.



ANOTHER POCKET CAMERA FROM ANSCO

Anco has added the new Model 411 to its low-cost line of 110 pocket cameras. With a telephoto lens and built-in electronic flash, it has a suggested retail price of only \$31.25. The Model 411 also features automatic adjustment from ASA 100 to ASA 400, extended flash range of 20 feet, an easy-to-use viewfinder with framing for the telephoto lens, a ready light, and a 25mm 1/8 coated lens. For further information contact Anco Photo-Optical Products Corporation, 1555 Louis Avenue, Elk Grove Village, Illinois 60007.

MODERN TESTS

Double Frame 35 is Singular Success

When the Yashica Samurai X3.0 first appeared, its unusual shape and approach to the concept of point-and-shoot photography prompted many industry observers to recognize it as the camera with the shape of the future. A dissenting minority, particularly those with long memories, took one look at the bulky, vertically oriented smooth body and immediately recognized it as the shape of the past. Not only did it have the look and handling characteristics of something called a super 8 movie camera, its film format resembled one that used to be called half-frame, or single-frame, 35mm. Yashica calls the Samurai's format Double 35, but what's in a name? The end result is twice as many negatives, measuring 17x24mm (2/3x1 inch), as you would ordinarily get on a roll of standard 35mm film—48 pictures, for example, on a 24-exposure roll.

But shape and format aside, make no mistake—the Samurai is a legitimate 35mm point-and-shoot camera with an innovative ergonomic design and just about all the automatic, electronically assisted features that have become standard fare on all cameras of this type.

This rather curious reevaluation of point-and-shooters has produced one of the first ergo-

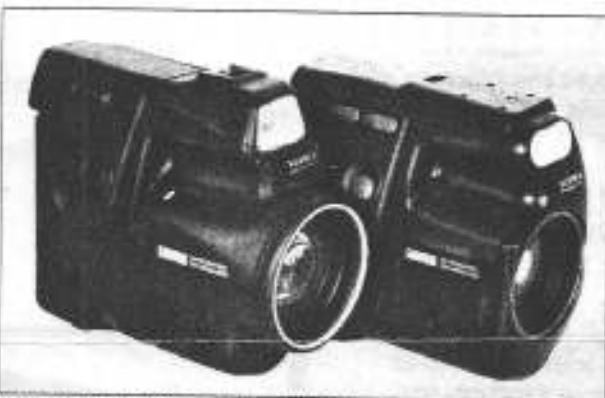
nomie SLRs and the first to sport a built-in 3X zoom lens. Strangely enough, it came about as a result of a survey among Japanese businessmen who wanted a camera with a long-range zoom lens they could put in their attaché cases. They could have had a 3X zoom on a lens/shutter auto-focus type camera, but preferred an SLR design small enough to be used as a "memo" type camera. In order to make it flat and small enough to fit these requirements, Yashica abandoned the full-frame 35mm format, figuring the picture quality from half-frame negatives on the latest fine-grain film would be good enough for these memo-type shots. The idea of a between-the-lens shutter SLR may seem old fashioned but its complement of modern electronic controls positions the Samurai as an innovative, trend-setting P&S model in its own right.

Before we get to the camera, a reassuring word about half-frame...oops, Double 35. Processing, at least for negative film, should not be a problem. Photofinishers, including one-hour mini labs, need only modify their printing equipment by inserting the appropriate lens and negative transport system to give you the standard 3 1/2x5 or 4x6-inch prints you've come to expect from 35mm negatives. (You may have to wait a bit longer than an hour for results in this case.) Transparencies are a different matter. You have to tell the lab to return them to you *unmounted*. You get back a continuous roll of processed film, which you then must cut apart and mount yourself. (Two companies will supply half-frame mounts by mail: Pic Mount Corp., 40-20 22nd St., Long Island City, NY 11101; and Gepe 216 Little Falls Rd., Cedar Grove, NJ 07009.) Yashica is banking on the fact that the majority of point-and-shoot photography is

in negative film, particularly color negative, which the labs can easily handle.

In resurrecting the two-for-one negative, Yashica's designers were able to solve a problem that may have caused considerable grief among fans of the format in its earlier incarnations. As you well know, conventional 35mm cameras, when held normally, produce a horizontal picture. The first half-frame cameras were conventional 35s and shot a vertical picture when held horizontally. In the vertically oriented Samurai, the film travels vertically from bottom to top so you get a horizontal photo when you hold it in its normal position; turn it 90 degrees and you can shoot a vertical.

If you still think this is a conventionally shaped camera that should be held with its long side flat, you'll be persuaded otherwise when you first pick it up. For one thing, all controls and the largish, clear LCD info panel on its 2 1/4-inch wide back are made to be read when the camera's long (4 1/2-inch) side is held upright. More important,



X4.0 provides built-in hot shoe in slightly wider body but ergonomic grooves and controls are the same as on X3.0 model.



Back includes LCD panel with mode, date and frame number data, date and mode setting controls, and film ID window.



Convenient diopter correction lever under eyepiece adjusts finder to individual user's eyesight.

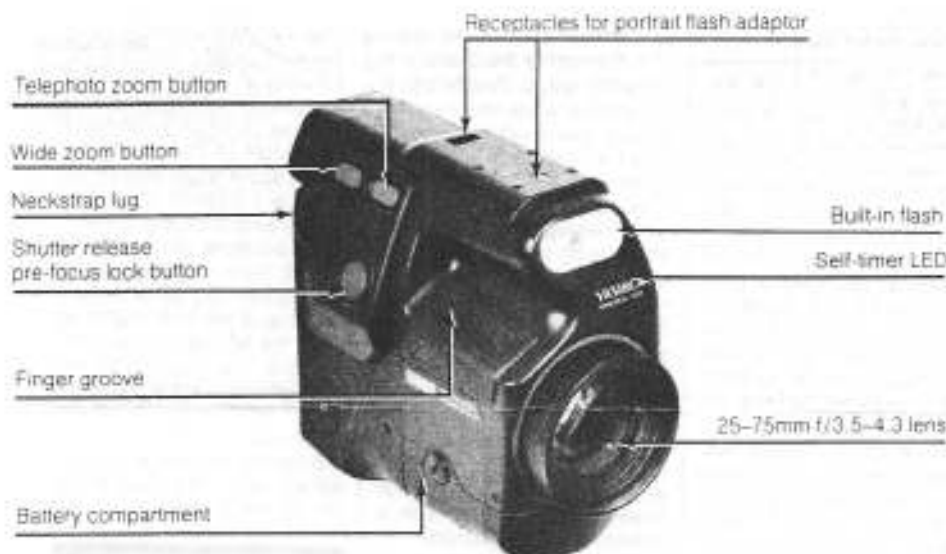


Power zooming and shutter release buttons are grouped in uncluttered area at top of camera's right side.



Later model, Samurai, left, is slightly deeper and higher to accommodate longer-ranging zoom lens, other features (see text).

YASHICA SAMURAI



AT A GLANCE

however, are its two recessed grooves. As you cup the Samurai in your right hand, wrapping your thumb around the bottom, the thumb falls naturally and comfortably into the groove on the bottom of the left side. At the same time, the last three fingers land just as naturally in the recess at the top front of the Samurai's right side while your index finger comes to rest on the round shutter-release button just behind the groove.

Thus, you have, in effect, a camera you can operate with one hand—that is, if you don't mind shifting fingers slightly to hit one of the two buttons immediately above the shutter-release that zoom the 1/3.5-4.3 lens from 25mm to 75mm and all points in between. If you must, or want, to zoom in the one-handed position, the operation can be a bit awkward and slow. A better idea is to wrap your left hand over the top of the body, super B style, so that your left index and middle fingers fall on the zoom buttons. This two-listed handling is not only faster, it makes for a steadier grip on this relatively light, 20-ounce machine.

In use we found the Samurai rested comfortably in our hands, largely because of the intelligently located grooves.

When used with the two-handed grip, it was well balanced with all controls within easy reach of their designated fingers. Balance was also aided by the self-contained "interior" zoom lens, a design that goes a long way toward eliminating the problems of imbalance that often arise when long lenses are added to otherwise conventional 35mm-type bodies. At 20 ounces it may be a mite heavier than many of the earlier P&S models but this, plus its uniquely contoured shape, actually make for steadier handling.

The Samurai gets its power from a 6-volt 2CR5 lithium battery, which you can easily replace by unscrewing (via the usual, handy coin) the compartment lid on the bottom right front and popping in a fresh cell. You'll know when to do it (after about 1,000 frames) because a battery symbol will appear in the LCD panel and start blinking. Even so, you'll still have enough power for 24 to 36 exposures. You can change batteries in mid-roll without losing any continuity in the LCD panel's indicators because a second lithium cell, which runs the built-in data back (more on that later) also acts as an LCD memory backup. This keeps

track of, among other things, how many frames have been exposed. We're told this backup cell will last about ten years so there's no need for immediate worry. But if the date display starts blinking sometime around the turn of the century, take the camera to a Yashica dealer to have the backup cell replaced.

Your first task after loading the battery is loading the film—and it may be a little disconcerting at first, though we got more comfortable with it after a few practice runs. Slide a button on the bottom of the camera in the direction of the arrow and the back, hinged at the top, pops open. Since it is hinged at the top, you have to lift it up or hold the camera sideways so that it remains open while loading. The interior is standard except, of course, that the film cartridge chamber, with its four DX contacts, is under the lens. The chamber itself is smaller than usual, but you still draw the film leader out until its tip is under the orange mark on the underside of the back and the sprocket holes are engaged on both sides. Popping the cassette into its chamber can be a little tricky until you realize you should insert the bottom first. Chances are you'll have

MANUFACTURER'S SPECIFICATIONS: Yashica Samurai X3.0 35mm auto-focus SLR with built-in 25-75mm f/3.4-4.3 lens. Serial No.143033. **SHUTTER:** Electronically controlled between-lens leaf, with speeds from 2-1/500 second. **FILM ADVANCE:** Motor-driven with single-frame and continuous modes, up to two fps. Auto-loading and rewind. **EXPOSURE SYSTEM:** Program AE automatically shifts between wide-angle and telephoto. SPD cell reads TTL average center-weighted pattern with automatic shift to spot metering. Range EV 3-18. ISO 50 to 3200 for DX-coded film; ISO 100 for non-coded. **AUTO-FOCUS:** Passive phase detection system uses CCD array to set lens steplessly from 3.3 feet to infinity. **FLASH:** Built-in electronic flash located at top of body front. Recycle time approximately 2.5 seconds. Flash range with ISO 100 film, 3.3-10 feet. **LENS:** Non-interchangeable Yashica 25-75mm f/3.5-4.3, constructed of 14 elements in 13 groups. Accepts 49mm threaded filters. **VIEWFINDER:** Non-interchangeable eye-level prism. Non-interchangeable focusing screen with central AF sensing area. LEDs on bottom of image area show status of AF and flash systems. Viewfinder magnification 0.5-1.52X (with lens set at infinity) and displays 83 percent of image area. **OTHER FEATURES:** LCD panel on body indicates film frame number, film advance/rewind, self-timer, battery condition, drive mode, data back setting. Cancellable ten-second electronic self-timer with visible indicator. Tripod socket. Built-in optional data back. **BATTERY:** One 6-volt 2CR5 lithium battery in locking compartment. **PRICE:** Yashica Samurai X3.0 with case, \$488; Samurai X4.0 without case, \$630 (\$24 for case); Portrait Flash Adaptor SM-S1, \$21; Flash CS-140, \$39.

MODERN TESTS

enough leader already out of the cartridge—and you may even have to wind a little bit back into the cartridge—before loading. Then it's just a matter of closing the back and letting the auto load/advance-to-frame-one system take over. Right away you may be startled to hear and see (by way of the LCD panel's flashing PROPER LOAD symbol) eight frames clicked off before the number 1 appears. Remember—it's two-for-one.

Now you're ready to take pictures. Turn the power on by depressing a red button within a black rectangle upward. When the power comes on, two symbols immediately pop into view on the LCD panel—the cartridge symbol indicating proper film advance and the

mode indicator. The latter setting is always in the auto flash mode. Exposure is, of course, normal and the flash is automatically activated in low light when you first turn on the power, no matter what settings were in effect when you last turned the camera off. Pressing the small gray MODE button in the lower of two rows of controls under the LCD panel engages the NIGHT SCENE mode. This is indicated by an appropriate moon-and-star symbol, which disengages the flash, enabling tripod-supported time exposures up to two seconds. Another press of this button displays both symbols, which enables you to shoot fill-flash. (If the subject brightness is ad-

equated the flash will not fire.)

To the right of the mode button, a tiny gray button activates the auto-rewind mechanism should you want to remove your film in mid-roll. At the extreme right you'll find another gray button that controls the film drive options. Normally, after turning on the power, that is, you have the usual single-frame motor-driven operation. By pressing the drive button you can get, in order, continuous shooting at a rate up to 2 fps in bright light on an already-focused subject, a ten-second cancellable silent (blinking LED on the camera's front) self-timer and a combination setting for three consecutive shots after a self-timed ten-second span.

But no matter what drive or exposure mode is in effect, the operating principles are similar to conventionally shaped P&S cameras. A small rectangle in the center of the viewfinder serves as the target area for the Samurai's passive phase detection auto-focusing system. Slight pressure on the shutter release locks in the AF setting and a green LED dot at the bottom strip of the finder lights up when the AF system has completed its task. If the LED blinks, your subject is not in focus, although you'll still be able to trip the shutter.

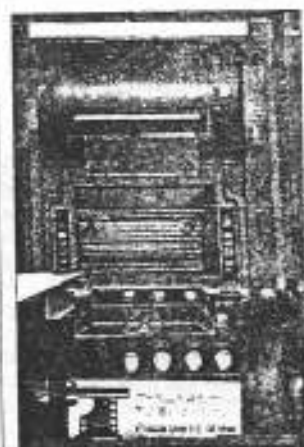
If flash is needed, a red LED dot appears in the finder to the left of the green AF signal.



Bottom houses battery compartment in rear (right), tripod socket and back opening lever in front. Pointer indicates second back-opening control, useful when camera is on tripod.



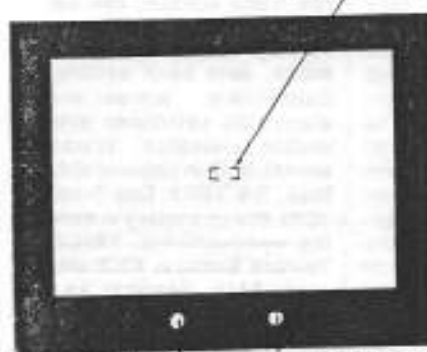
1. Automatic flash activation mode
2. Battery check mark
3. Night scene mode
4. Exposure counter
5. Continuous three-frame shooting by self-timer
6. Self-timer shooting
7. Film transport/rewind mark
8. Date display
9. Print confirmation mark
10. Continuous shooting
11. Slow-shutter fill-flash mode



Film gate, at pointer, is located close to cassette chamber in foreshortened half-frame format back.

VIEWFINDER

Focusing frame



Flash indicator lamp (red)

Sharp-focus lamp (green)

Uncluttered viewfinder display includes essential AF target frame and LED indicators for flash ready/recycling and sharp-focus confirmation.



Two-handed grip is natural with grooves for right hand. Left hand over top puts fingers in contact with zooming buttons.



Shooting verticals is convenient with minimum shifting of right hand away from ergonomic grooves.

YASHICA SAMURAI

Double 35 or half frame—no matter the name, you still get twice as many exposures, half the size.

Steady to indicate flash-ready, it blinks immediately after exposure to show that the unit is recycling. While the flash is recycling you cannot trip the shutter, operate the zoom buttons or fire the shutter while you're zooming.

Like other similarly controlled AF cameras, the Samurai is subject to the same passive system bugaboos. It won't focus on subjects that are too dark or too light, that have low contrast or just horizontal lines (the proverbial Venetian blind) or a consistent pattern of vertical lines (a child's playpen, for example), or an indistinct subject, such as smoke. In such cases we picked out a subject at a distance comparable to that of our

main subject, locked the AF on it with slight pressure on the shutter release, recomposed and shot.

In addition to the normal complement of auto functions—film movement, focus, flash and exposure—the Samurai provides backlight compensation. The Samurai's centerweighted metering system automatically switches to a spot metering mode when you aim the camera at someone against heavy backlighting and reads the subject in the center of the finder area for proper exposure. Or, if necessary, it will switch all the way to auto-flash to make the exposure correct.

Now for the top row of control buttons on the back, those just under the LCD panel. They

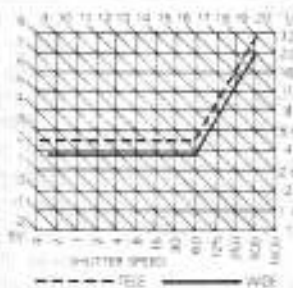
LAB RESULTS: YASHICA SAMURAI No.143033

GENERAL PERFORMANCE

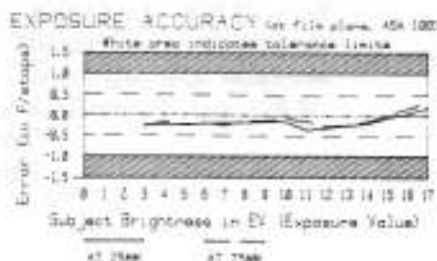
Checkpoint	Our Standard	As Tested
FINDER:		
Apparent viewing distance	Between infinity and 20 in. (0.5m)	Adjustable between infinity and 10 in. (0.3m)
Apparent distance of information scale	Between infinity and 9 in. (0.2m)	Adjustable between infinity and 10 in. (0.3m)
View area compared to film area	Vertically and horizontally more than 85%, less than 100%	Vertical: 85% Horizontal: 85%
Parallax error compared to film	Vertical: 1.3mm Horizontal: 1.8mm	Vertical: 0.6mm (down) Horizontal: 0.3mm (right)
Image magnification	at 25mm: 0.50X $\pm$ 1X at 75mm: 1.52X $\pm$ 1X	0.57X 1.62X
PICTURE SIZE:	17 $\pm$ 0.6mm x 24 $\pm$ 0.6mm	17.5mm x 24.5mm
OTHER:		
Self-timer delay	7–15 seconds	10 seconds
CAMERA NOISE:	58 dB(a), very quiet for an autofocus SLR	
CAMERA SIZE:	Body and lens: 2 1/8 in. wide x 4 3/8 in. high x 5 in. deep (71 x 119 x 128mm)	
WEIGHT:	Body and lens: 1 lb. 5 oz. (607g) with batteries	

A Note About This Test Report

Many readers may have noticed that some of our standard test data are not included herein, and some adjustments were made to our test procedures. Since Yashica Samurai is a completely automatic camera, with no provision for manual exposure settings, our resolution tests were conducted by controlling the light intensity on the target according to the manufacturer's exposure program. Since no manual control of the lens was possible, our contrast and optical bench measurements were made using a special tester supplied at our request by the manufacturer. The apertures in the test data represent the closest approximations possible. Kenji Yamamoto, Laboratory Manager.



Exposure program differs at each end of zoom range, favors shutter speed until EV 16 is reached.



RESOLUTION

YASHICA SAMURAI 25–75mm
f/3.5–4.3
at 25mm/1/78

f/	Center (l/mm)	Corner (l/mm)
3.5	V. Good	46 Very Good
4.3	V. Good	46 Excellent

at 75mm/1/78

f/	Center (l/mm)	Corner (l/mm)
4.3	Accept	34 V. Good
5.6	Accept	34 V. Good

Lab Results:
25–75mm
f/3.5–4.3
No.143033

PERFORMANCE

Our Standard	As Tested
Focal length: $\pm$ 5% (20.75–26.25mm)	24.71mm
	73.36mm
Aperture: 5% at 25mm: (f/3.33–3.68)	f/3.34
at 75mm: (f/4.09–4.52)	f/4.10
Distortion: 25mm: ($\pm$ 2.5%)	0.71% (barrel)
75mm: ($\pm$ 2.5%)	1.42% (pinpoint)
Light falloff: at widest f/stop	
25mm: (0–1.6 stops)	0.6 stops
75mm: (0–1.1 stops)	0.1 stops

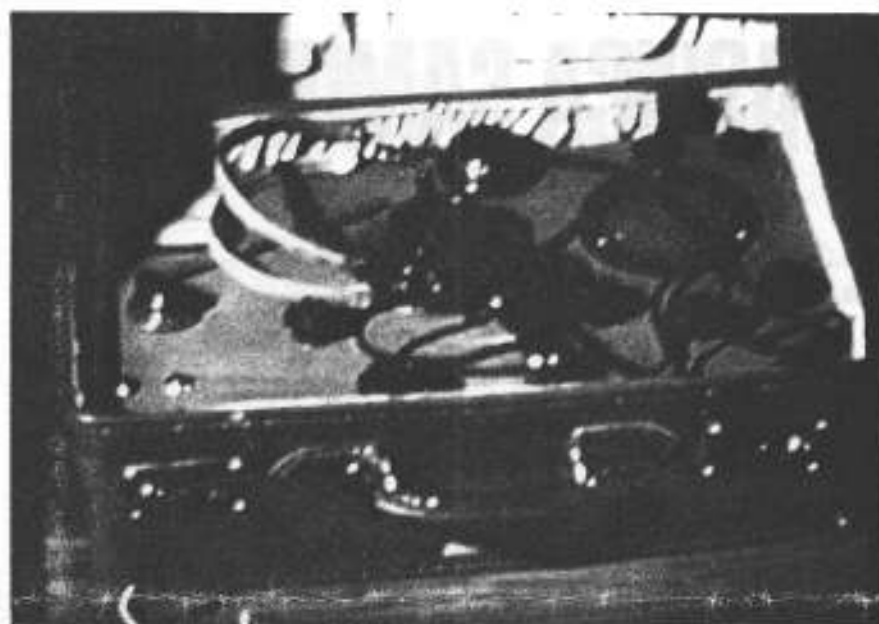
CONTRAST

at 25mm/30 lines/mm

f/	Center (%)	Corner (%)
3.5	High	54 Medium
4.3	High	54 Medium

at 75mm/30 lines/mm

f/	Center (%)	Corner (%)
4.3	Medium	35 Medium
5.6	Medium	35 Medium



THE GREAT SPY MOVIE FAN CLUB

Hi Al:

Kindly find enclosed print of OSS agent's short wave radio-in-suitcase, WW II era, taken from a videocassette copy scene from "O.S.S." (Alan Ladd, Geraldine Fitzgerald) with my Minox EC. No flash, available light, night-time.

All the best, di-dah-di-dah-di-dah! (AAA)

Thomas J Mahon,
Retired

Thanks Tom:

Lets put our heads together and compile a list of "Must See" Submini videos. Al

Cooking Secrets of the CIA —
Gingerbread House & Holiday
Treats, Vanilla Kipper; yule log. 83817

I saw this promo in our "TV Guide" and thought, Ho Boy, this should be interesting! The setting was the kitchen of the Bavarian Embassy.

After ten minutes I was up and pacing. Hey Bunky, enough with the cookies. Show me the bread box with the shutter button on the side. Or a cake with a hacksaw. Anything! No such luck. They had me right up to the



closing credits.
That's when I learned that CIA is Culinary Institute of America.

NUTS & BOLTS

MAKE A COMBINATION MONOPOD/WALKING STICK

By Wayne Fugate



Completed monopod/walking stick.

Hiking and photography are natural companions. An invaluable aid in the active pursuit of both hobbies is a combination monopod/walking stick.

Construction materials include two feet of $\frac{3}{4}$ -inch or $\frac{1}{2}$ -inch rigid, seamless, thin-walled metal tubing; one hard rubber or plastic handle (should fit snugly); one $\frac{3}{4}$ -inch $\times$ $\frac{1}{4}$ $\times$ 20 (threads/inch) bolt; two $\frac{3}{4}$ -inch nuts; three washers; 16-inch nylon cord; and paint.

Putting it together is simple. While standing, grasp the tubing and place one end on the floor. With your forearm horizontal, mark and cut the tubing at the point even with the top of your hand. Place one end on a solid surface, and using a hammer, flatten, roll and crimp the metal—forming a point.

With one washer in place, push the bolt through the handle grip until the threads emerge from the small hole at the end. Place another washer and one nut on the bolt and tighten. If necessary, use the last nut and washer to reduce the length of the remaining exposed thread to $\frac{1}{4}$ -inch or slightly less. Finally, drill a hole through the tubing one inch below the handle grip; insert and tie the wrist cord. Now you can add paint.

Now you've got both a hiker's and a photographer's best friend—on the trail.