

*HOW TO take
better pictures with
your* **YASHICA®**

WE ARE happy to welcome you to the family of Yashica owners. Whether your Yashica camera is still or movie, simple or advanced, you will certainly wish to "get the most" out of it in the way of movies, slides, or black and white prints.

There are certain "basics" not covered in the instruction booklet which could make the difference between a "snapshot" and a photo you will be proud to mount and display—and perhaps enter into contests.

We hope this booklet will give you a general knowledge of these basics of still and movie photography, and assist you in such things as the proper selection of films, exposure, accessories, lighting, and use of exposure meter.

TYPES OF CAMERAS

A convenient feature of the Yashica line is that it offers cameras in nearly all categories—twin-lens reflex, single lens reflex, 35mm rangefinder, half-frame 35's, 16mm

subminiature and 8mm movie cameras, as well as accessories such as light meters and flash equipment.

A budding photographer, starting with a basic model such as the Flash-O-Set II or a twin-lens A model, can advance later to more professional equipment. The 35mm user might continue on to the Lynx semi-automatic or single lens reflex, while the twin-lens fancier might buy the Yashica-Mat, the fully-equipped model used by so many news photographers.

It is safe to say that once you own a Yashica, you will remain with the line, perhaps owning several different types, including a movie camera. You might well consider the smaller 4x4 twin-lens reflex, which permits you to shoot super-size slides which fit into a standard 35mm projector and fill the screen.

Or, for economy's sake, you may wish to go into the half-size 35mm format, with the

72E, or its companion, the Mimy, with fully automatic exposure control.

THE ABC'S OF FILM

We're all aware that light hitting the coating of the film records an image, which, when developed, is the negative of the final print we want. But there are all types of films, and they come in all speeds.

What, exactly, do we mean by "film speed?"

Simply this: Some films require less exposure (light) to record an image than others. This "speed" is usually given in an "ASA number" such as 80, or 160, or 400, or for some of the extremely fast films, as high as 1000 (or more).

Now you'll probably ask, "Why shouldn't I use a very fast film, rather than a slower one, so I can shoot in the shade, or indoors, or by room light?"

No reason. "Available light" photography can give some very striking results. But

there are two factors to consider: 1) Will your camera be able to handle such film, i.e., will the shutter and lens-opening controls and electric eye be adequate for such fast speeds, and 2) will it really be necessary if you simply wish to photograph outdoor subjects in the sunlight?

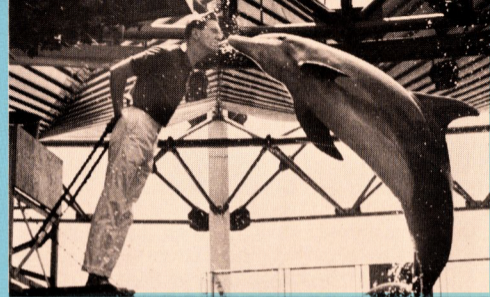
There is another important consideration: Usually the faster the film speed, the larger the individual particles of silver which make up the image on the negative. This is called "grain." In certain cases; on a print, this grain can be objectionably large.

Considering these factors, it seems logical to use the film which will give you sufficient speed for the shooting occasion, as well as the finest possible grain.

Of course, this may mean you'll have to experiment a bit, but you may find that a medium speed film with an ASA of about 160 would do very nicely for all normal outdoor occasions. In color, you might choose a

speed of ASA 25. For overcast days, or indoors, or under ordinary lights, you might find that a film with a speed of 400 or 500 would prove practical. Naturally, all this depends on the type of camera, its controls, and the exact light condition.

You may realize that black and white film can be used in any type of light—daylight, incandescent, fluorescent, flashbulbs, floodlights and electronic flash, just as long as there's sufficient light for the film. But color film, either reversal (slides) or negative (prints), is another story. Since each type of light has a different color "temperature," or emphasis on certain colors, the dyes in color film are specially balanced for different types of light. For instance, you'll find that "daylight" type film will be fine for daylight photography (except during the early morning and late afternoon, when sunlight is too orange), and for an electronic flash (such as the Yashica Pro-40). The "temperature" of



Use a fast film to stop action. J-5 Photo by Weegee at Florida Pavilion, Worlds Fair

the electronic flash is generally about that of daylight—6000° Kelvin. Blue-coated flash bulbs are fine, too.

However, daylight color film is definitely not right for other types of artificial light—the results look off-color and untrue. This can be corrected by using color films specially

balanced for artificial light.

There's another point to remember with color: if you're using one type film (indoor, for instance) and wish to use it outdoors, you can do so by using a "conversion" filter of the proper type. Your dealer can tell you which filter to use for the specific film under the specific (light) condition.

One reminder: Always keep the instruction sheet as an ASA speed reminder.

SHUTTER AND APERTURE

These are the controls that determine the exposure of the film. If they are set properly, you should get a perfect print or slide. However, if you have a fully-automatic or semi-automatic camera, such as the EE, the Lynx, the Minimatic C or the Flash-O-Set II, you normally won't have to worry about them.

The shutter control determines the speed at which the shutter will open and close, and will be marked in a number of different speed ranges, up to a top combination of 1 second

to 1/1000 second, plus bulb. Bulb keeps the shutter open as long as the release is held down.

Obviously, the shutter determines the *length of time* the light admitted by the lens will act on the light-sensitive film.

But, with the aperture control (usually a ring around the lens barrel), we can also control the *amount of light* that is admitted. The diaphragm, marked anywhere from f/1.8 (the maximum opening of the lens) through f/22 (the smallest), can be adjusted to give us any amount of light we wish. These numbers, by the way, are called "stops."

Let's say we have decided that the proper exposure to use for a particular light condition is 1/125 second at a lens opening of f/8. But, for some reason, we wish to use a faster shutter speed (perhaps our subject is an active child, and we wish to stop the action). We would, then, change the shutter speed to

—let's say—1/250 second, which is twice as fast.

| | | | | | | | | | | | |
|---------------|------|-----|-----|-----|----|----|----|---|---|---|---|
| SHUTTER SPEED | 1000 | 500 | 250 | 125 | 60 | 30 | 15 | 8 | 4 | 2 | 1 |
| LENS OPENING | 2.8 | 4 | 5.6 | 8 | 11 | 16 | 22 | | | | |

Every combination from 1/1000 sec. at f/2.8 to 1/15 at f/22 gives equivalent exposure.

But we immediately realize that we are also cutting our exposure time in half. What can we do?

If we double the amount of light the lens is admitting, we are back at the proper exposure, since *twice* the light for *half* the time is the same as *half* the light at *twice* the time.

In other words, as long as the same *volume* of light hits the film, our exposure is accurate.

Therefore, in the above situation, we would "open up" one stop—toward the smaller number, remember—to f/5.6 (As the number

gets smaller, the lens opening gets larger, and vice versa.) In this way, twice the amount of light would come through the lens, at half the time, (1/250 second), to give us the exposure equivalent to f/8 at 1/125 second. (f/8 at 1/125=f/5.6 at 1/250.)

There are other occasions when we would wish to close down the lens opening—sometimes, as a matter of fact, to its smallest aperture. This may sound strange, since you realize you would have to sacrifice shutter speed as you stop down the lens. Why, then, close it down?

DEPTH-OF-FIELD

Depth-of-field is the answer.

Once you have the main subject in focus, does that guarantee everything else will be in focus? Not necessarily. It's an interesting fact that the *larger* your lens opening is, the *narrower* the area of sharpness in front and behind your subject. And just the reverse,

the more you stop down the lens, the wider the sharp area in front and behind the subject. This is depth-of-field.

There is only one true point of focus, and this will be the sharpest area of all. But for all intents and purposes, there is a zone in front and behind that point which is satisfactorily sharp, and this zone—the depth-of-field—depends on the aperture of the lens as well as its focal length.

To illustrate, if we are using a J-5 with f/1.8 lens of 55mm focal length to photograph a person, say, 10 feet away, everything from a distance of 9'5" to 10'6" will be acceptably sharp if the lens is wide open—at f/1.8. However, if we stop down the lens to, say, f/5.6, we will get an increased area of sharpness from 8'5" to 12'2".

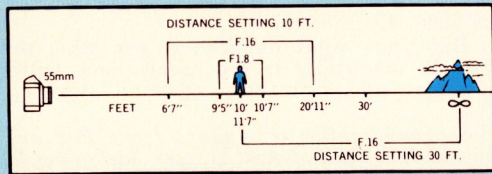
Quite a difference, especially if we have other people in the viewfinder. But if we go even further, and stop down to f/16, we will find that we can get a sharp field from 6'6"

to 20'9". Even better.

But then, what happens if you wish to get the mountains in the background, with a human subject in the foreground? Simple.

Foreground action is in sharp focus, but see how short depth-of-field throws background out?





Depth-of-field scale will assure a sharp photo. If you check the depth-of-field scale on your camera, or the chart in the instruction booklet, you will discover that at f/16, with the distance set at 30', everything from 11'7" to infinity will be sharp. In other words, if the subject is located about 12 feet away from the camera, everything behind him will be sharp.

This is an interesting phenomenon, but there is a danger. Your shutter speed, at this aperture, may be extremely slow—under 1/60 or 1/30 second. It would be very advisable at these speeds (or slower) to use a

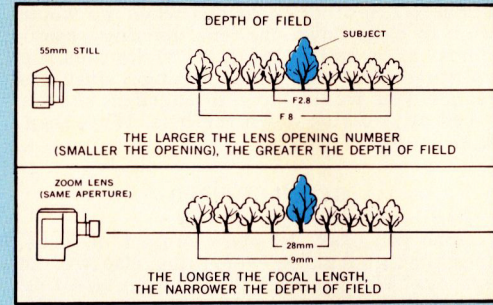
brace or a tripod, and a cable release, to prevent camera "shake."

Almost all Yashica still cameras have depth-of-field scales built into them. In the movie cameras, however, there is no scale on the camera; you must rely on the charts in some of the instruction booklets. Keep in mind that the shorter the focal length of the lens, the greater the depth-of-field and, conversely, the longer the focal length, the narrower the depth-of-field at the same aperture and focusing distance.

This will become very important as you shift from one focal length to another (wide angle through telephoto) in the Yashica zoom movie cameras, for while you may be covering your subject matter with adequate sharpness at wide angle, much of it may be unsharp at telephoto. You can be sure, however, that regardless of the focal length or how far you zoom, the *subject*, once *in focus*, will *remain* in focus throughout the zoom

range. You should first focus at telephoto position, however.

Incidentally, you can use depth-of-field in reverse. There are times when you may wish deliberately to throw something out of focus—a disturbing background, for example. By



Not only lens opening, but focal length, determine the depth-of-field you're getting.



You can throw a distracting background out of focus with a narrow depth-of-field.

—Pentamatic photo

using a lens opening with sufficiently narrow depth-of-field, and setting your subject within that area, all else will be out of focus.

FOR GOOD EXPOSURE, DON'T GUESS

We have been discussing proper exposure, but have neglected to find out how to achieve that happy state. This is probably the most bothersome problem facing the photographer—or was, until the development of the photo cell.

A photo cell measures the amount of light reaching its photo (light) sensitive surface. The meter needle will give you a series of shutter-diaphragm combinations, all perfectly proper for the light being measured. (You must first, of course, dial in the proper ASA film rating.)

In theory, if you point the meter at your subject, and choose any one of the combinations on the meter, your exposure will be perfect.

But there's a catch!

You must make sure the meter is actually measuring the light falling on the *subject*, and not the brighter or weaker light from surrounding areas, which tend to average the total light to something quite different.

Suppose you are photographing a subject 20 feet away, under a shady tree. The sun is bright, and the sunlit area and sky reflect considerable light. Obviously, if you stand 20 feet away and point the meter, a good deal of the light the meter "sees" is sunlight, which will give a completely untrue reading for the subject in the shade. You will find the subject quite underexposed, and the surrounding scenery (which you're really not interested in) properly exposed.

So, how do we make certain we are measuring the light properly?

Easy. Take the meter right up to the subject—a foot or so away—and take the reading directly from the subject. In this example, take the meter under the tree, and point it

YASHICA SINGLE LENS REFLEXES



J-5 Another in the J-series, the J-5 features a fully automatic diaphragm, shutter-coupled two-stage CdS meter, and sharp microscreen focusing. Also features fast f/1.8 lens, automatic mirror, shutter speeds to 1/1000. Under **\$190** plus case.



J-P—Fully automatic with f/2 Yashinon lens, 1/500 sec. shutter. Auto-reopen diaphragm, stop-down preview, thread lens interchangeability. Under **\$150**. Case extra. Optional clip-on Cds meter, **\$25**.



AUTO-YASHINON fully automatic lenses for J-series and other threaded cameras includes 35mm wide angle, **\$120**; 135mm medium telephoto, **\$140** and 200mm telephoto, **\$190**.



ACCESSORIES: Preset Super Yashinon-R lenses that cover the most popular focal lengths from 35mm wide angle to 400mm telephoto, plus a zoom lens that covers the 90-190mm range. Also available: Extension tubes, extension bellows, right angle finder, microscope adapter, adapter rings, plus a full selection of filters for both black & white and color photography.

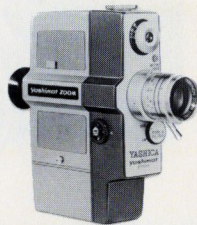
YASHICA ALL-ELECTRIC MOVIE 8's



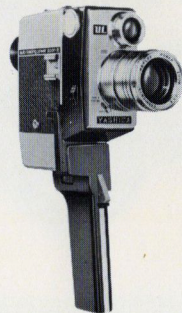
8ES Fully automatic point-and-shoot with universal focus lens, warning in finder. Under \$50.



Yashimat S Compact movie 8, with fully automatic CdS electric eye. Under \$70.



Yashimat Zoom Compact reflex movie 8 with CdS electric eye, manual zoom. Under \$120.



8UL Auto-threading, reflex power zoom, sensitive CdS meter, with warning in finder. Under \$190.

YASHICA 35mm and HALF FRAME CAMERAS



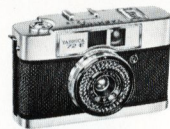
35EE Fully automatic exposure control with lens-circling electric eye; fast f/1.9 lens. Under \$100.



LYNX-5000 Compose, focus and set exposure through the finder. F/1.8 lens, built-in CdS meter. Under \$95.



MINIMATIC C New programmed shutter does the thinking for you, gives perfect results—just focus and shoot. Under \$70.



72E Half-frame 35 with uncoupled electric eye, focuses from 2½ ft. with distance scale. Under \$45.



MIMY Point-and-shoot half-frame 35, with universal focus f/2.8 lens, lens-circling electric eye. Under \$45.



Half 17—Double the exposures with the fastest lens-shutter auto exposure system—f/1.7 and 1/800th sec. Computer-Scope viewfinder tells all—exposure, distance, frame. Under \$75. Case extra.



MINISTER D Features uncoupled "2-in-1" meter, perfect for backlighted shots. F/2.8 lens. Under \$70.

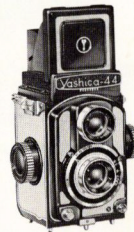
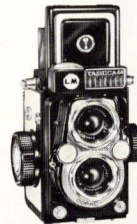
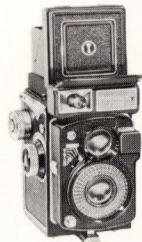


35YJ Sharp photos are yours every time with the YJ, with fast f/2.8 lens. Kit includes case and flash. Under \$60.



16EE Subminiature with programmed shutter, fully automatic exposure. Cartridge load. Under \$65.

YASHICA TWIN-LENS REFLEXES

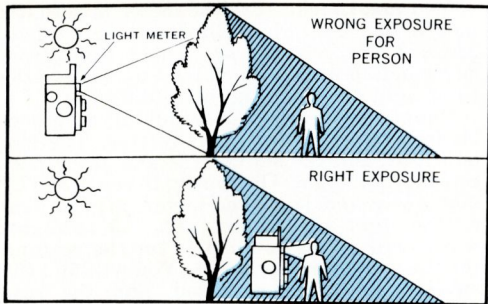


YASHICA-MAT A professional camera featuring quality optics, fully automatic crank action film transport. Under \$76.
YASHICA MAT-EM With all the fine features of the Mat, but includes a built-in uncoupled exposure meter. Under \$85.

YASHICA 635 Dual format camera uses standard 120-size film, converts to 35mm. Under \$70 with compartment case, conversion kit.
YASHICA E "Point-and-shoot" model features fully automatic exposure control and built-in AG-1 flash. Under \$55.

YASHICA D Perfect "in-between" model, with semi-automatic film transport, matched f/3.5 lenses. Under \$50.
YASHICA A A full-size model for the beginner; advanced features include matched f/3.5 lenses, ground glass focusing. Under \$36.

YASHICA 44LM Light and compact, the 44LM uses 127-size film, features built-in uncoupled exposure meter. Under \$60.
YASHICA 44A Compact size for the beginner, with all the features of the full-size Yashica A. Under \$36.



The right and wrong way to use a light meter.

at the subject's face. Then, when you return to the camera and set the shutter and aperture controls to one of the combinations on the meter, you will get the proper exposure for the subject under the tree. Of course, you will then find the surrounding sunlit area may appear overexposed. However, we

agreed earlier that you were not interested in the surroundings, only in the subject.

But suppose you wanted both the subject and the surroundings properly exposed?

You could not achieve this exactly, but you could compromise. Take a reading of the subject as outlined and then take a reading of the surrounding area. The in-between setting would be the correct one. While both subject and surroundings would be somewhat under- and over-exposed, there would be sufficient latitude in the film for perfectly satisfactory results. (With the Minister-D "2-in-1" meter, compensation is automatic.)

For example, suppose the shade reading is $f/4$ at $1/125$ second, and the sunlit reading is $f/8$ at $1/125$ second. If you compromise, and use a setting of $f/5.6$ at $1/125$ second, you should get the result desired.

Use the same system when you are photo-

Good exposure brings out shadow detail.

Yashica E Photo by Roger Higgins



graphing a person whose face is partly in the light and partly in shadow.

Another technique in proper exposure is to use a substitute subject for the original subject. If it is not possible for you to get up close enough, you can substitute another person close at hand, under the same lighting conditions.



A good light meter like the Yashica YEM-55 cadmium sulphide unit, can prove invaluable.

There are several cameras in the line with built-in meters, such as the Yashica Mat-LM, the 44LM, and Minister. These are used like a hand held meter.

There is one point to remember: Even with a built-in meter, it would be wise to take the meter (in this case the whole camera) right up to the subject and use it as described earlier. Of course, if the camera is set up on a tripod and precisely focused, this might prove unfeasible. For such cases, it might be wise to invest in the inexpensive Yashica YEM-55 exposure meter.

There are other cameras in the line, however, with automatic and semi-automatic exposure systems, such as the Flash-O-Set II, the Minimatic C, the Lynx-5000, and the EE.

Ordinary exposure is no problem with such cameras, but again you have to recognize those times when the electric eye is unable to distinguish the subject from the surrounding area. With the Lynx and the EE, it is

possible to take a reading up close.

In the Lynx, with match-needle system, just bring the camera up to your subject and match the needles there, then go back and take the photo. Even if the needles are not aligned at the shooting position, you should remember that you *do* have the proper setting for your subject.

In the fully automatic EE, there is a "hold" system to maintain proper exposure until the shutter is tripped. Just depress the shutter release part way when you view the subject from the close-up point, then, holding it in the same position, return to your shooting point, and depress all the way.

At some time, you may wish to control exposures manually. With the Lynx, to override the meter, simply set the shutter and diaphragm rings. With the EE, turn the ring to "manual" and set them as you wish. The Flash-O-Set II and Minimatic C can be used only in fully automatic position.



Expose for the background for silhouette.
—Yashica-Mat photo by M. Komatsu

Just one point: From time to time you'll want to try a very interesting photo—the backlighted subject. (When light comes from behind the subject.) For a properly exposed *subject*, use the method outlined above. But

you may want a *silhouetted* subject. In such cases, simply expose for the background, which will naturally give you an underexposed (dark) subject in the foreground and a bright background.

AND THEN THERE IS FLASH

With the increased speed of films, there is less need for extra light in the way of flash or (in movies) floods. But it doesn't mean these lights don't have their uses.

We usually divide flash into two categories: flashbulb and electronic flash (incorrectly called strobe). In the former, you must use a new flashbulb after each shot; in the latter, the flash tube lasts indefinitely—you should get thousands of flashes.

Usually, an electronic unit (such as the Yashica Pro-40) can be used for both black and white and outdoor color film, since its color temperature approximates that of sunlight.

For electronic, always use X synchroniza-



Fill-in flash for shooting out-of-doors will bring out shadow details ordinarily lost.

J-5 Photo by Charles Varon

tion on your camera—either by moving the lever to X on some models, or by plugging the electronic flash into the X terminal on the

single lens reflexes. Shutter speed is irrelevant, except for the single lens reflexes, which should be set at X.

Getting proper exposure is simple. If the

LEAF TYPE SHUTTER

| SPEED SYNCH | 1 | 2 | 4 | 8 | 15 | 30 | 60 | 125 | 250 | 500 | 1000 |
|----------------|------------------|---|---|---|----|----|----|-----|-----|-----|------|
| X | ELECTRONIC FLASH | | | | | | | | | | |
| | "M" CLASS BULB | | | | | | | | | | |
| M | "M" CLASS BULB | | | | | | | | | | |

FOCAL PLANE SHUTTER

| SPEED SYNCH | 1 | 2 | 4 | 8 | 15 | 30 | x 60 | 125 | 250 | 500 | 1000 |
|----------------|------------------|---|---|---|----|----|------|-----|-----|-----|------|
| X | ELECTRONIC FLASH | | | | | | | | | | |
| | "M" CLASS BULB | | | | | | | | | | |
| FP | FP CLASS ONLY | | | | | | | | | | |

EXAMPLE BULB TYPE

| | |
|------------------|-------------|
| ELECTRONIC FLASH | PRO 40 |
| "M" CLASS BULB | M2, M5, M25 |
| FP CLASS BULB | #6 |

(For best results on YE and FLASH-O-SET II, use M2 or M3 bulbs.)

Use this chart as a guide to proper selection of shutter speeds and bulbs for flash photos.

electronic flash is used as the primary light source (in darkness or in fairly low light levels), simply select the guide number for the ASA speed of the film (it will be on the flash unit or in its instruction book), and divide the distance to your subject into this guide number. This will give you your lens opening. The light output of each individual flash unit will vary, so you may have to make adjustments to compensate.

For instance, suppose you are using an electronic flash with a guide of 32 for ASA 10. If you are 5 feet away from your subject, you divide 5 into 32, and get 6 (plus). Set your diaphragm between f/5.6 and f/8. If you were twice as far away, 10 feet, using the same system gives you 3 (plus), which is close enough to f/3.5 to use that stop.

If you have a flash that uses bulbs, it is probably the B-C type, which means a battery charges a condenser, to deliver peak power to the bulb at all times, even when the

battery weakens.

Since most Yashica cameras have M-X synchronization (with exceptions to be noted), you should use an M class bulb, such as the M2, M5 or M25 in either clear for black and white and indoor color, or blue-tinted for outdoor color film. The synchronization should be M, of course, and the guide number can be determined from the specific package of bulbs. Keep the box—you may have to refer to it for the guide number.

Some Yashica cameras, such as the A, 44A, and Flash-O-Set II, have X only. Here you can still use the M bulbs, but you should limit your shutter speed to 1/25 second or slower on the A models. The shutter speed on the Flash-O-Set II is fixed, so you will not have to be concerned, either in using the built-in AG flash unit, or in using a separate B-C or electronic flash.

The single lens reflexes, since they have focal plane shutters, require a different type

of bulb. This is the FP, most common of which is the #6. When using this bulb in a standard B-C flash, use the FP terminal on the camera at any shutter speed. Again, the package will give you the guide number.

The most common type of flash photo is the head-on shot, where the flash is attached to the camera. After you have taken some, you may find the rather deep shadow directly behind the subject annoying.

Try the bounce technique to eliminate such shadows. Point the flash to a light colored ceiling (either by tilting the head, if it's movable, or by removing the flash from the camera). With bounce, the aperture must be opened somewhat, because of light diffusion. How much, depends on room size and coloring, but start with one and a half stops wider, and then make adjustment after checking results.

Flash is also used to erase harsh shadows caused by the sun. It's simple to figure fill-in

flash exposure, too. Use your normal daylight exposure, then divide the bulb's guide number by the lens opening, which will give you



Focus on infinity when taking distant objects, and get everything in sharp focus.

the distance from the subject for your flash. Results are extremely natural looking, and well worth the effort.

WHAT'S THE TRICK TO FOCUSING?

The most common focusing system is the superimposed image rangefinder, which is used in the Lynx, EE, and Minister models. Here, mirrors measure the angle between the base line of the camera and the subject, and automatically set the lens for that distance.

When you peep into the viewfinder, you will note a bright square of a different color in the center of the field. If the subject is not in focus, you will see a double image in this little square, which, as you move the focusing ring on the lens, will gradually merge. In exact focus, there will be only one image. The only difficulty you may encounter when you first try such a rangefinder is a tendency to look at the *square* instead of at the *subject through the square*. A bit of practice will clear this up.

While the ground glass of the twin- and single-lens reflexes is simpler to use, unless you use it properly it may tend to be less accurate than the rangefinder. This is because the *exact* point of focus is a matter of your judgment and the ability of your eye to distinguish that point. In the twin-lens reflex, you have the pop-up magnifier to assist you.

In cameras with fresnel lens screens, always use the clear center spot for focusing. With the magnifier close to the eye, over the major point of interest in the subject, turn the focusing knob until the image clears. Then, move it past until it gets slightly fuzzy; then back again, until it clears. Continue this back and forth action, cutting it closer each time, until you are sure of the clearest possible focus.

The Penta J, with the "Tri-Way" finder, gives you a choice of three ways of focusing.

In the "Tri-Way" system, the split-image

rangefinder works somewhat differently than the superimposition type. Here, you simply line up the upper half with the lower half, and when the image in the center circle is unbroken, you are in focus. The rangefinder is especially fast for sharp vertical lines in the subject.

Outside the center circle is the microscreen, which has a tendency to "pop-in" and "pop-out" of focus very obviously, unlike ground glass, which does it gradually. When using the microscreen, you will *know* when the subject is in focus—it will rear up and practically hit you in the eye.

The next ring, the ground glass, works like the ground glass on the twin-lens reflexes. While many people prefer the split-image finder, the ground glass is more accurate for close-up focusing; (remember, you can get down to about 18" on these cameras). It also permits you to check depth-of-field.

In the J-3 and J-5, you have only microscreen and ground glass focusing.

THE ART OF MOVIE MAKING

Your Yashica movie camera instruction book gives complete details on how to load and operate the camera. It would be wise to reread these instructions carefully, especially the section on loading. Some people find, from time to time, that they get "light streaks" on the film. This can be avoided by loading the film in subdued light. Also, if you bend the end of the film up slightly before you insert it into the take-up spool, you will find the spool slips on to the spindle more easily. On variable speed cameras use 24 fps for a few seconds at the end of the run to tighten up the film on the spool.

There are several pointers to keep in mind to assure you of more than just routine films.

Perhaps the most important is to let your camera tell a story. This may sound like it's

beyond your capacity as a weekend filmmaker; that it takes too much trouble; that you need too much technical knowledge.

Not so!

First, consider what you want in a film. Is it merely a record of a place you have visited, or the children playing in the yard, or of the family getting together at a backyard barbecue? If so, read no further.

But if you feel you'd be willing to try a little experimentation, and perhaps even "waste" a roll of film, you can expect something far more interesting.

Your first thought in making a good film is to have it tell a story. It needn't be a Hollywood epic, but it should have a beginning, a high point of interest, and a finish.

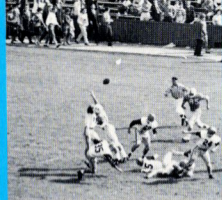
Take the ordinary circumstances of the children at play: Wouldn't it be far more interesting to show them in preparation for the activity, then to show them hard at work at it, and then to show them, tired but happy, on the way home?

There are several things to keep in mind when shooting:

1) Keep the camera rock steady, especially at telephoto. While the pistol grip is fine, it might be worth investing in a good tripod, which will guarantee elimination of the "shakes."

2) Use zoom sparingly. It can become monotonous to "rush in" and "rush out" for no apparent reason. More often, the zoom lens should be used as a variable focal length lens, to give you long shots, medium and closeups (or anything in between). Use the zoom only for dramatic purposes, such as when a youngster is waiting to catch the ball. Zoom in dramatically as he snares it, and capture the victorious expression on his face.

3) Be careful with panning. When you sweep the camera from one direction to the other, or tilt it up or down, do it very, very slowly to eliminate flicker. Better yet, on variable-speed cameras, shoot at 24 frames



To get all the excitement of an action sequence, start at wide angle...

then zoom in slowly and carefully to a normal focal length...

and end up with a tight closeup at telephoto

per second, to cut flicker. But also, remember that panning, like zooming, can be very tiresome when done too often. Avoid panning back over the same subject.

4) Short, jumpy scenes can become annoying. Try to vary the scene length. You will find it smoother and easier to watch.

5) Learn which direction to turn the focusing ring to move the focus farther away, and closer. Also, try to determine by touch just how far to move it for a specific distance. This will help you keep a moving subject in sharp focus as you concentrate on the action.

6) If you would rather not worry about refocusing, set the distance at 20' outdoors, when the lens opening is $f/8$ or smaller. This will give you sufficient depth of field to cover most situations. Indoors, with an $f/4$ opening or smaller, you can set it to $5\frac{1}{2}'$, but only if you remain at wide angle (9mm focal length). If your instruction book has depth-

of-field charts, you can consult them for specific lens openings to obtain a universal focus distance.

7) Learn to use the aperture and wind-back controls for fades and lap dissolves. One or two trials will give you an accurate idea of how fast to fade, and how far to rewind, for your own taste. You should remember, however, that in order to fade out, you must (before starting the scene) set the diaphragm control wheel to the aperture indicated on the meter. Then—slowly—you can close down completely. And, for the next scene, you should fade up to the same point (or if the light has changed, check for the new value first). The effect will be striking. If you rewind between fades for, say, a half foot to a foot, you'll get a perfect lap dissolve, where the fade-in is superimposed over the fade-out, and you see both scenes simultaneously.

You should remember that you can only

focus on the spot in the center of the viewfinder—not in the clear area around it. Focus as suggested earlier under the section on focusing. Make sure you have precisely focused the viewfinder eyepiece first, then focus the lens on the subject. You can check for accuracy by looking at the distance scale on the focusing ring.

While Yashica movie cameras are designed for automatic exposure, it is still necessary to recognize those occasions when the CdS electric eye can be "fooled." In photographing strongly sidelighted or backlighted subjects, the shadow areas will be extremely dark unless some compensation is made. That's where the $1\frac{1}{2}X$, $2X$ and $4X$ markings on the CdS meter come into use. For a sidelighted subject, move the ASA setting to the mark between normal exposure and $2X$, or to $2X$ itself, depending on how strong the shadows are. For strongly backlighted subjects, move the ASA setting to the $4X$ mark.

This will automatically increase the exposure by 1½ times, 2 times or 4 times, and give you luminous shadows. Be sure to return the setting to normal afterwards.

Unlike the older electric eye, the Yashica CdS meter, with its narrow angle of light acceptance, makes it quite simple to take movies indoors with the new single source lights. You can either use such a light pointed directly at the subject, or "bounce" it from a white ceiling for overall illumination. Just be certain that the warning indicator shows you have sufficient light.

CARE OF YOUR CAMERA

As with any delicate instrument, your Yashica camera should be handled with care for consistently fine results in picture taking or filming. It would be advisable to send in your camera yearly for a service check, adjustment and cleaning. The rates are low, and it will assure you of a properly operating camera at all times.

As with any precision instrument, you should avoid dropping your camera, or causing it any shock or mishandling. Be especially careful not to carry it by the lens (and most especially, avoid treating a zoom camera in this way).

Never carry it in the trunk or glove compartment of your car.

In any event, your camera is warranted for a period of a year against manufacturing defects. Should it not operate properly within that time for such defects, send it, with your guarantee card, to any of the Yashica service stations listed on the Yashica guarantee certificate.

—Mike Bienstock, *YASHICA Inc.*

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