

RUSSIAN CAMERAS TODAY

In the years since the war, the U. S. has been a truly international marketplace of cameras. Americans have been able to buy cameras from every corner of the world, with a single big exception—Russia. For a long time this was not an important exception, because it was known that Russia lagged far behind the West in camera design and production. As might be expected, the Russians have been slavish imitators of Western design. But in very recent years, under the stimulus of competition and an expanding market, Soviet designers have shown as much vitality and originality in the photographic field as in missiles and satellites. This year at the Brussels Fair, Russia exhibited a whole line of cameras, obviously with the hope and intention of creating demand for them in foreign

They can no longer be dismissed as inept copies of Western designs. Here is a roundup of the newest

markets. Simon Nathan, an energetic free-lancer with several photo books to his credit, was there to look them over. He talked to technicians, persuaded them to allow him to remove the samples from display cases, and actually took pictures with them. Here are details, specifications, and pictures of the cameras he saw—all, as it happens, 35-mm models.

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HOW GOOD ARE THEY?

POP PHOTO's technical staff has acquired four of the most important Russian cameras for testing. Their evaluation will appear next month.

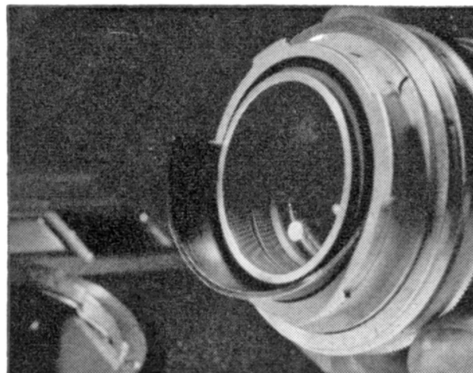
COMETA



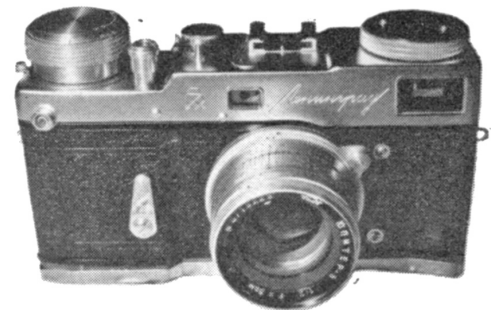
- Semiautomatic exposure setting through meter coupled to shutter speeds and aperture of interchangeable lenses
- Illuminated bright-line viewfinder frames automatically appear for 50-, 85-, and 135-mm lenses. Automatic parallax compensation
- Focal-plane shutter; continuous speeds 1 to 1/1000 second
- Rapid film-advance and shutter-cocking lever
- Standard lens is 50-mm Merkuri f/2
- Interchangeable lenses from 20-mm f/5.6 to 135-mm f/2.8



Coupled meter automatically sets correct exposure when aperture ring is turned to line up needle in crescent-shaped opening on top.

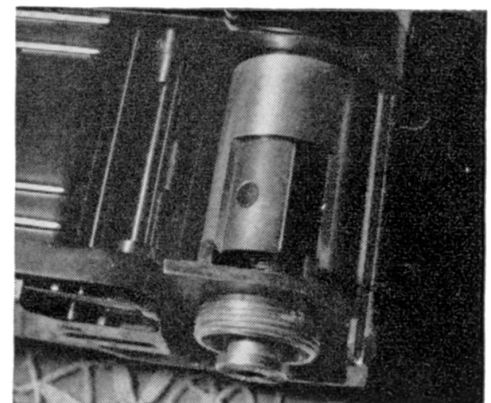


Inside view of lens barrel shows cam which couples aperture ring to meter—a design innovation unique with the Russian-made Cometa.



LENINGRAD

- Spring motor film advance, 15 frames per winding, 3 frames per second
- Focal-plane shutter; speeds 1 to 1/1000 second
- 50-mm Jupiter-8 f/2 standard lens
- Accepts wide-angle 35-mm Jupiter-12 f/2.8 lens



Close-up shows location of Leningrad's sprocketless spring motor. Outside of cylinder also serves as film take-up spool.

COMETA

35-mm coupled rangefinder camera, with shutter and diaphragm coupled to built-in photoelectric exposure meter; first known to work with interchangeable lens system employing focal-plane shutter. Exposure setting by turning aperture dial to line up meter needle. *Automatic parallax compensation. Continuous shutter speeds*, permitting interpolation between marked speeds, which are 1 second to 1/1000; flash synchronization from 1 second to 1/100. Rapid film-advance lever also cocks shutter. Can be used with two cartridges, making rewind unnecessary, or with cartridge and take-up spool. Film-speed indicator calibrated from 16 to 250 Gost (20 to 320 ASA; see chart). Supplied with 50-mm Merkuri f/2 lens; others available are 20-mm MP-2 f/5.6, 28-mm Orion-15 f/6, 35-mm Jupiter-12 f/2.8, 50-mm Jupiter-3 f/1.5, 85-mm Gekios-40 f/1.5, and 135-mm Tair-11 f/2.8. Accessory viewfinders for 20-mm, 28-mm, and 35-mm; built-in finder automatically adjusts for others. All lenses bayonet-mounted.

LENINGRAD

35-mm rangefinder camera with spring motor-driven film advance operating at up to three frames per second, 15 frames

on one winding. Advancing film winds around compact motor, which is in position of take-up spool. Focal-plane shutter; speeds 1 second to 1/1000. Supplied with 50-mm Jupiter-8 f/2 lens, thread-mounted; also takes 35-mm Jupiter-12 f/2.8. Rewind knob has film-speed dial calibrated in Gost and Din ratings, up to equivalent of 200 ASA.

PHI T-2 PANORAMIC

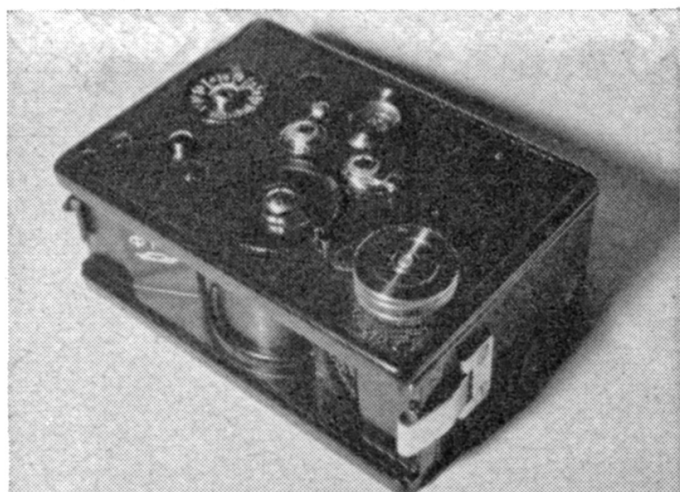
35-mm panoramic camera, making 12 pictures 24x110 mm on a standard-length roll of film. Fixed-focus, fixed-aperture f/5 lens, covering angle of 120 degrees. Shutter speeds: 1/100, 1/200, 1/400 second. Film must be loaded in special cartridges. Exposure determined by shutter speed, film speed, and light conditions. Open-frame viewfinder; traveling slit shutter.

YUNOST

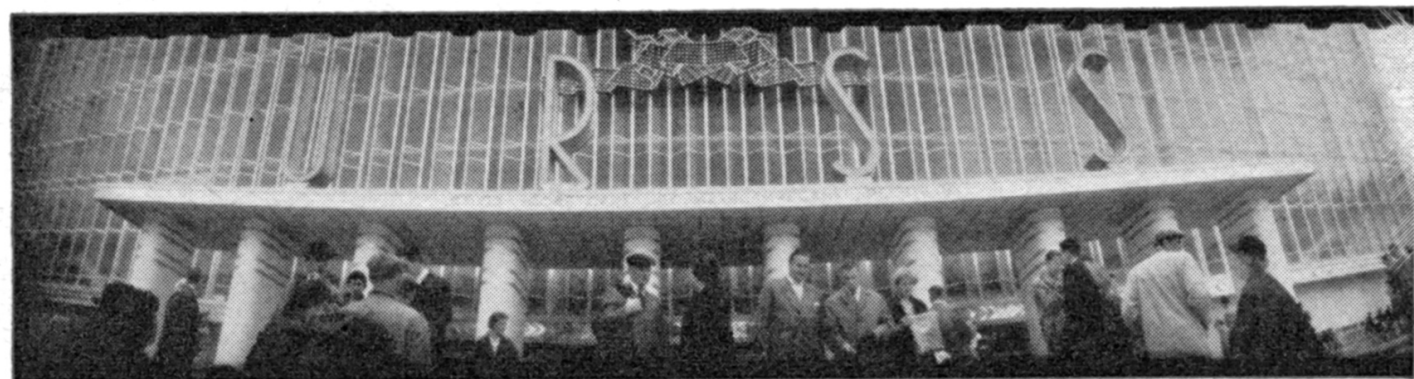
35-mm rangefinder camera with one-stroke film-advance and shutter cocking. Shutter-aperture coupling by simple external clip. Shutter speeds 1/8 to 1/250 second; between-lens shutter. Lens: 45-mm, f/3.5. Can use two cartridges, making rewind unnecessary.

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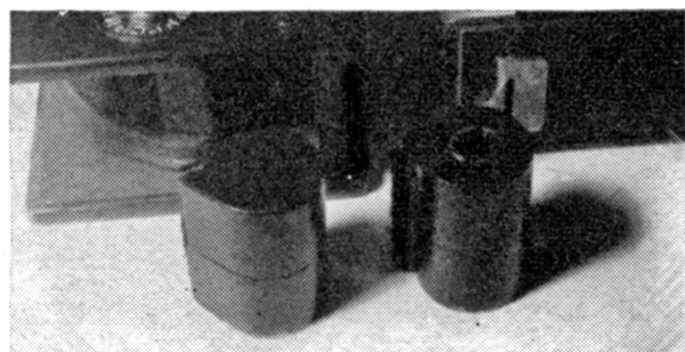
PHI T-2 PANORAMIC



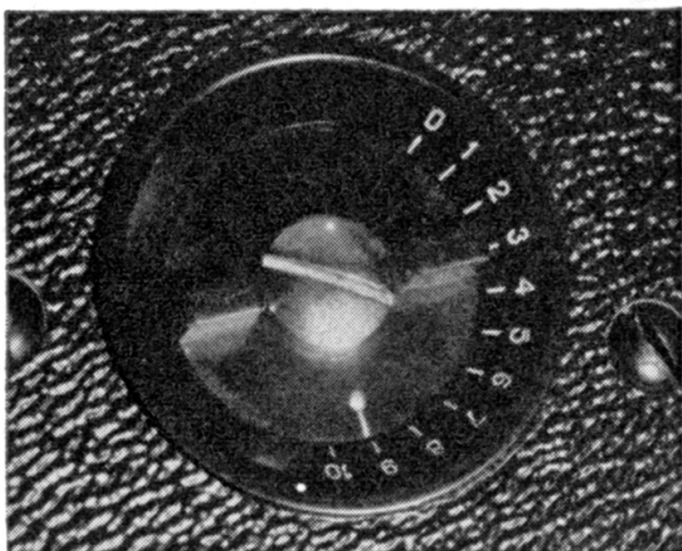
- Makes 12 pictures 24x110 mm on standard length of 35-mm film
- Fixed-focus lens has fixed aperture of f/5
- Shutter speeds 1/100, 1/200, 1/400 second
- Covers angle of 120 degrees
- Film must be loaded in special compact cartridges
- Traveling slit shutter
- Wire frame viewfinder



Panorama of the façade of the Soviet building at Brussels Fair show proportion of Phi T-2 picture; note sprocket holes along both edges.



Special cartridges are required for film in Phi T-2, quarter-inch shorter than normal.



Shutter tension is factory-adjusted on underside of camera, cannot be changed by user.

Russian Cameras Today

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ASTRA

35-mm stereoscopic camera with 35-mm $f/2.8$ lenses and coupled rangefinder combined with viewfinder. Shutter speeds from 1 second to $1/500$; rapid film-advance lever cocks dual cloth focal-plane shutters. Takes either two cartridges or cartridge and spool.

KIEV

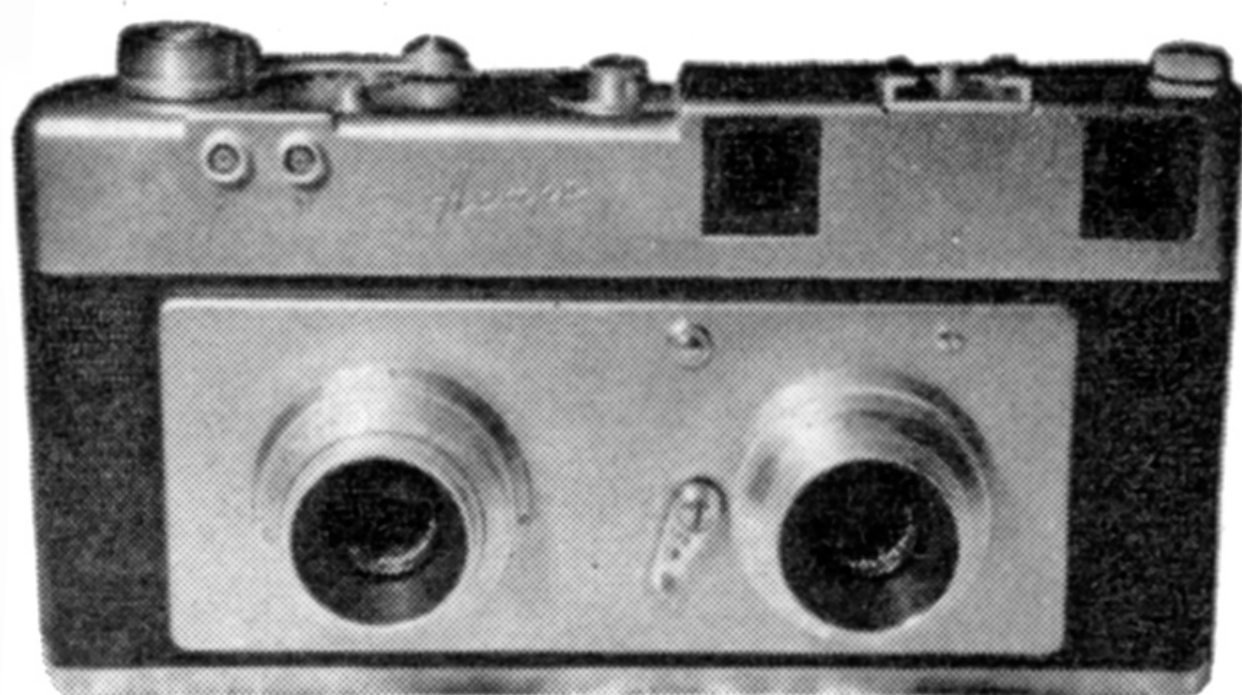
35-mm rangefinder camera, made from same tools and dies used for Contax II, now superseded in the West by the IIa. Has 50-mm Kiev $f/2$ lens.

START

35-mm single-lens reflex with removable pentaprism headpiece, groundglass viewer. Focal plane shutter, speeds 1 to $1/1000$ second. Rapid film advance and shutter cocking lever; double-exposure

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ASTRA STEREO



- Makes 29 stereo pairs to roll, frame size 24x23 mm
- Twin 35-mm $f/2.8$ lenses can be adjusted together or separately
- Shutter speeds 1 to $1/500$ second
- Coupled rangefinder
- Rapid film-advance and shutter-cocking lever

SMENA-2



- 40-mm T-22 $f/4.5$ lens
- Shutter speeds (between-lens), $1/10$ to $1/200$ second
- Focusing by scale
- Takes two cassettes; rewinding unnecessary
- Flash synchronization
- Self-timer

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prevention; film-speed indicator. Has built-in knife to cut off short lengths of film for immediate processing. Takes either two cartridges or cartridge and spool. Supplied with 58-mm Gelios-44 *f*/2 lens; others available are 35-mm Mir-1 *f*/2.8, 85-mm Gelios-40 *f*/1.5, 135-mm Tair-11 *f*/2.8, 180-mm Jupiter-6 *f*/2.8, 300-mm Tair-3 *f*/4.5, 500-mm MTO-500 *f*/8, and 1000-mm MTO-100 *f*/10.

SMENA-2

35-mm viewfinder camera, focusing by scale, fitted with two magazines to obviate necessity for rewinding. Shutter speeds (between-lens), $\frac{1}{10}$ to $\frac{1}{200}$. Supplied with 40-mm T-22 *f*/4.5 lens.

KADR

35-mm rangefinder camera with lens interchangeability. Automatically changes viewfinder framing for all lenses. Be-

tween-lens shutter; speeds 1 to $\frac{1}{800}$ second. Film can be wound onto spool or into receiving cartridge. Rapid film advance and shutter cocking lever. Supplied with 58-mm Gelios-44 *f*/2 lens; others available are a 37-mm *f*/2.8, an 80-mm *f*/3.5, and a 115-mm *f*/5.6.

Knowing so much about Russia's cameras makes us wonder about the people who use them—and how they use them. Do they know about the cameras we use here? Do they know that we can buy film on almost any street-corner in America, and have a choice of brand and type that staggers the imagination?

Speaking of film: the Russian photographer must buy his in bulk and load it himself, buying an empty cartridge for 75 cents. It is said that factory-loaded cartridges will soon be available. All of the cameras described here, by the way, will accept the same cartridges we use,

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START

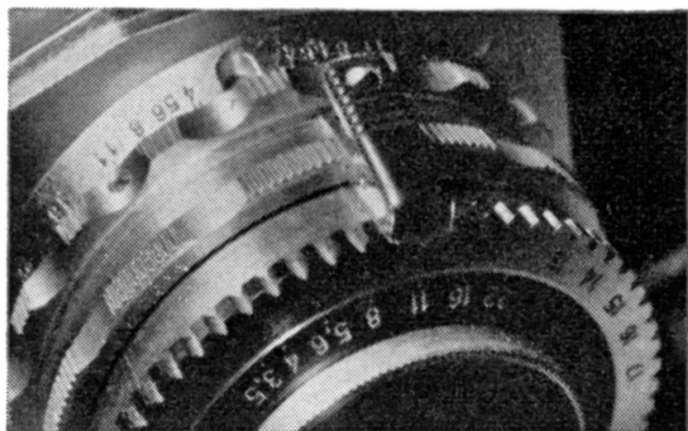


- 35-mm single-lens reflex; removable penta-prism headpiece
- Automatic diaphragming
- Focal-plane shutter, speeds 1 to 1/1000 second
- Supplied with 58-mm Gelios-44 *f*/2
- 7 interchangeable lenses available, from 35-mm *f*/2.8 to 1000-mm *f*/10
- Rapid film-advance and shutter-cocking lever
- Built-in knife to cut off film for immediate processing

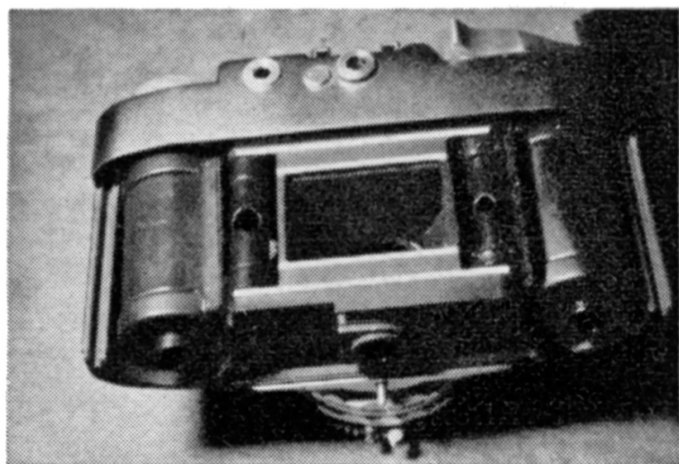
YUNOST



- Coupled rangefinder
- Between-lens shutter, speeds 1/8 to 1/250 second
- 45-mm *f*/3.5 lens
- Light value scale
- Electronic flash synchronization
- Rapid film-advance and shutter-cocking lever



Simple clip on shutter-speed ring locks it with aperture ring for LVS coupling, avoids precision internal mechanism otherwise needed.



Two-cassette system, feature of many Russian cameras but rare in Western models eliminates the necessity for rewinding film.

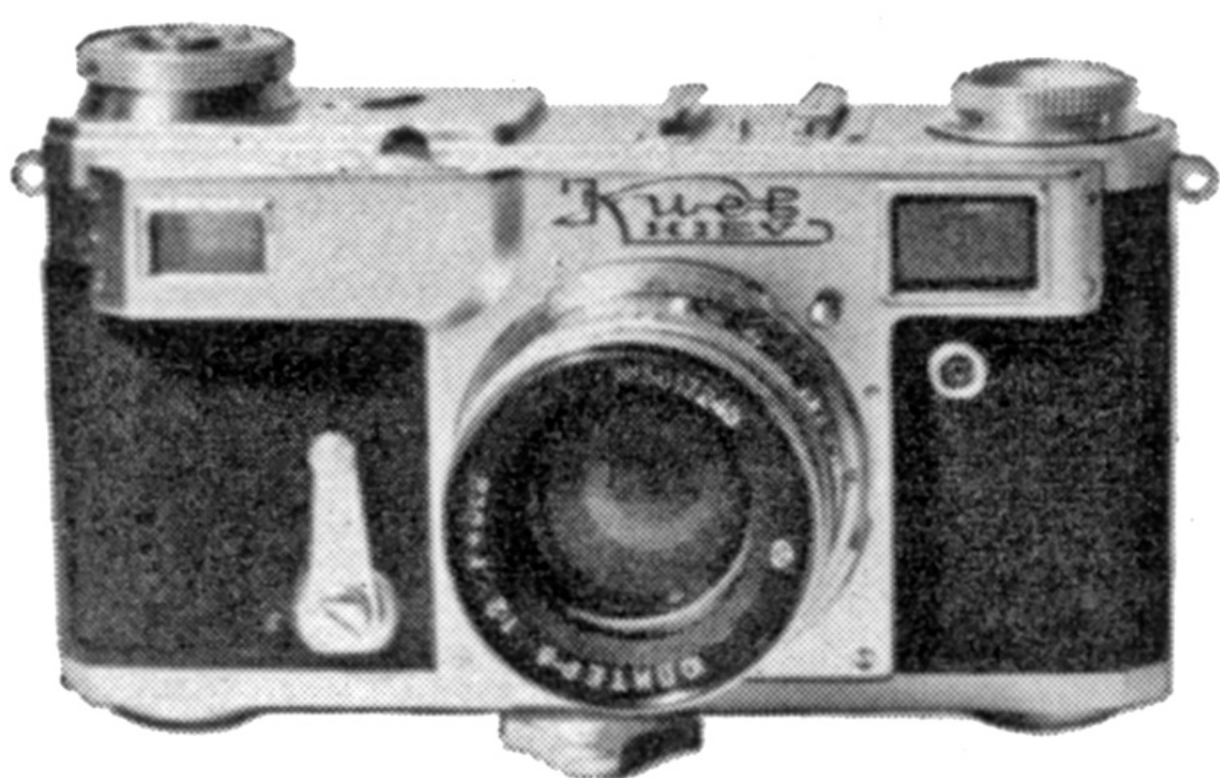
Popular PHOTOGRAPHY

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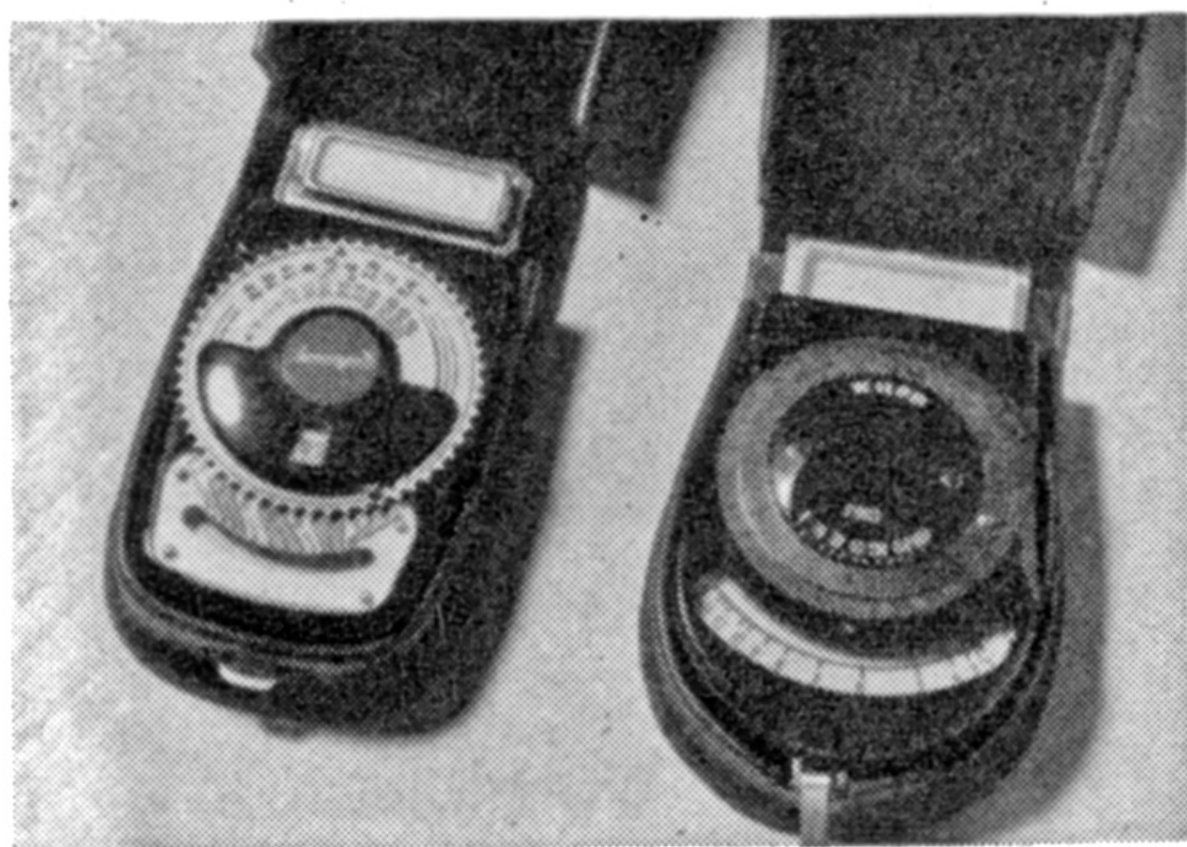
both for supply and take-up, except the Leningrad, which takes up film on the outside of its spring motor—and, of course, the Phi T-2 Panoramic, which takes special small-size cassettes.

KIEV



- Identical with German Contax II except for nameplate; made from captured tools and dies
- Coupled rangefinder
- Supplied with 50-mm Jupiter-8 *f*/2 lens, bayonet mount
- Shutter speeds 1 to 1/1250 second
- Self-timer

EXPOSURE METERS

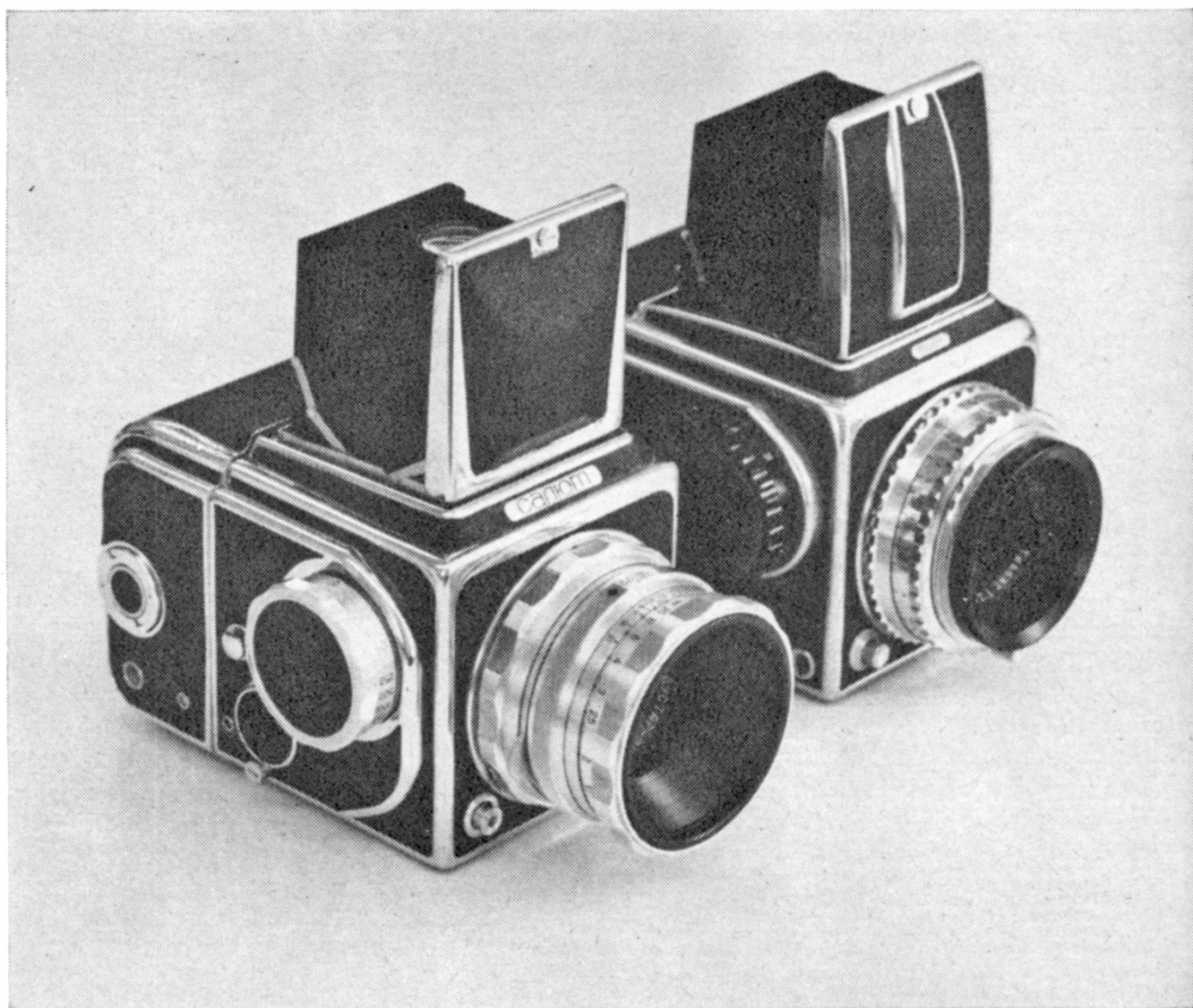


Two meters currently made in Russia are the Leningrad (left) and Kiev. They are calibrated in "Gost" numbers for film-speed rating, but on the back of each is a conversion table for ASA and DIN, the European system. The Leningrad sells for \$60, the Kiev for \$37.50. Russians claimed at Brussels that their fastest film was rated at 500 Gost (650 ASA), but indicator dials on late-model cameras suggest the maximum is about 320 ASA. Here is a table showing Gost equivalents in DIN and ASA:

| GOST | DIN | ASA |
|------|-------|-----|
| 8 | 11 | 10 |
| 16 | 14 | 20 |
| 32 | 17 | 40 |
| 45 | 18-19 | 55 |
| 65 | 20 | 80 |
| 90 | 21-22 | 110 |
| 130 | 23 | 160 |
| 250 | 26 | 320 |
| 500 | 29 | 650 |

Russian cameras are not sold in the United States, but they are sold in Canada. For further information write to Ukrainska Knyha, 962 Bloor St., Toronto 4, Ontario—

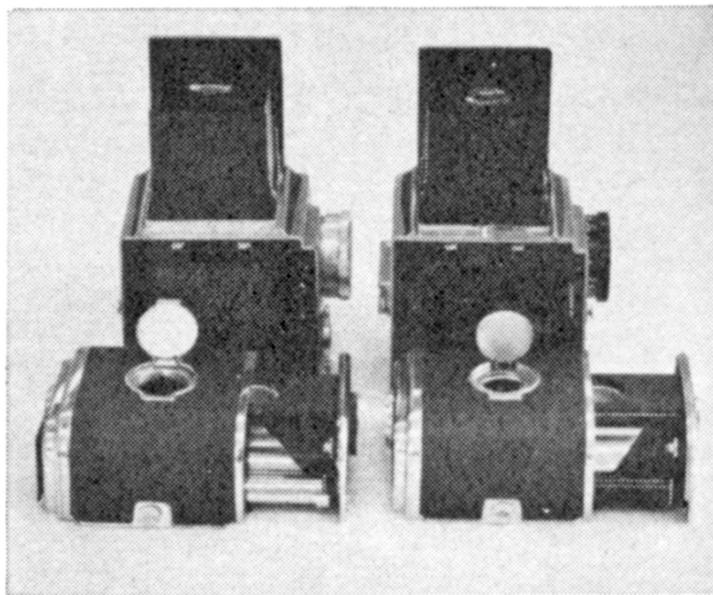
RUSSIANBLAD or HASSELNYET?



Russian Smena (left) is near spitting image of Hasselblad 1000 (right).

Hung up trying to decide between a Hasselblad, Bronica and Rollei 66? Need that fourth alternative? Here 'tis—a genuine Russian Smena 2¼ x 2¼ SLR with interchangeable roll film backs. Does it look like a Hasselblad? Well, sorta? It should, since it is a carbon copy attempt to duplicate the old discontinued Hasselblad 1600F which had a focal-plane shutter instead of the between-the-lens leaf shutter used on the modern-day Hasselblad 500C.

The Smena (meaning "shift" or "change" in Russian) is identical in shape, size and trim to the Hasselblad 1600F (we show a 1000F at right which is almost like the older 1600F). Some small items such as front hood panel design are a bit different, but it appears that a 1600F must have been taken apart by the Russian camera designers and molds made directly from the Hasselblad components. The complicated all-metal roller blind shutter is the same, the interchangeable backs almost fit the Hasselblad and a repairman could undoubtedly adjust them so they would. Interior design is much the same, except the Smena doesn't have as much light baffling as the Hasselblad. The Smena does have one improvement, however, a semiautomatic diaphragm. It shuts automatically when you press the shutter release and you twist a front lens ring to reopen fully afterward. The lens mounts are near identical and the 80mm f/2.8 lens of the Smena resembles the 80mm f/2.8 Ektar of the Hasselblad,



Smena back (left) looks same as Hasselblad (right) and can be made to fit.

except that the lens has an additional permanent lens shade. The Hasselblad lens fits the Russian camera (but won't focus completely to infinity) but the Russian lenses won't fit the Hasselblad. The focusing screen of the Smena is rather unsharp and a diagonal split-image rangefinder has been added in the middle to aid focus. The Smena has a self-timer which the Hasselblad 1600 F hasn't.

Construction on the Smena is rough and primitive. It's the difference between a dollar watch and a Rolex. Our sample was lent us by its owner, Olden Camera & Lens Co. If Olden really wants to do the impossible, they might try to repair this camera and keep it working. Worse luck for all of you dying to buy a Smena—closest place to pick up one is Russia.—H.K.

WILL THE RUSSIANS BEAT US TO A FULLY AUTOMATED CAMERA?

When the Russians so dramatically demonstrated their superiority in rockets and Sputniks last fall, they raised the question of potential superiority in other fields, including photography. If you've ever wondered what kind of progress Russian designers are making with cameras, you'll find the answer in the opposite photo. This camera with the odd, double-decker appearance is called the Cometa, and it's about as automatic as you can get these days in 35-mm equipment.

In the first place, it lays claim to being the world's first miniature camera to combine a match-the-needles semi-automatic exposure system with the advantages of a focal plane shutter—providing full lens interchangeability plus a complete range of shutter speeds from 1 to 1/1000 second.

(Closest Western competitors are several German cameras using a behind-the-lens version of the leaf-type Prontor SLK shutter to achieve lens interchangeability. Speeds on this shutter range from 1 to 1/300 second. Two cameras of this type are currently available in this country, the Braun Paxette Automatic Super III and the Regula III d Automatic.)

Another first for the Russians is the lens mounted on the Cometa, a 20-mm $f/5.6$ super wide-angle with 93-degree coverage. The big auxiliary viewfinder perched on top of the camera is for this lens. (The shortest focal length we can buy for a 35-mm camera is the 21-mm $f/4.5$ Zeiss Biogon.)

The range-viewfinder system on the Cometa provides automatic parallax correction, and viewfinder floating bright-line frames automatically exchange inside the camera to match the fields of view of the 50-, 85-, and



Russian-built Cometa scoops Western cameras by offering semi-automatic exposure control plus full lens interchangeability, focal-plane shutter, automatic parallax correction, automatic framing for 50-, 85-, 135-mm lenses.

135-mm lenses.

The film-winding mechanism and shutter-cocking device are simultaneously activated by a single-stroke advance lever located at top right on the camera. The film can be run from cassette to cassette or from cassette to take-up spool—you choose. The counter zeros when the camera is loaded, and of course automatically keeps count as the film is run through.

The Cometa's focal-plane shutter, controlled by the large knob on top of the camera, provides 11 marked exposure times ranging from 1 to 1/1000 second plus bulb, although the interesting claim is made that exposure settings are continuously variable, thus making it possible to use intermediate speeds. The shutter release button is mounted on the front of the camera body.

Seven bayonet-mounted lenses are available for the Cometa: a 20-mm $f/5.6$, a 28-mm $f/6$, a 35-mm $f/2.8$, a 50-mm $f/2$ and $f/1.5$, an 85-mm $f/1.5$, and a 135-mm $f/2.8$. On the back of each lens is a black metallic cam which, on first guess, you might assume is some kind of rangefinder coupling. Well, it's not. The cam is connected to the diaphragm and completes the coupling between each lens and the exposure meter. The exposure control is similar to the system employed on Western-made cameras. That is, you pre-select your film speed, set the shutter speed, then adjust the aperture control until you zero a needle visible in the exposure-meter window on top of the camera. The Russians call this "semi-automatic," but from the size of the Cometa our guess is that space has been built in to permit further refinement of the idea.

The Cometa yields 36 24x36-mm frames per roll of conventional 35-mm film, provides flashbulb synchronization for shutter speeds between 1 and 1/100 second.

Perhaps the Russians won't get there first, but from a look at what they're already producing it seems obvious we'll have aggressive competition as we strive to develop a fully automatic camera.—*Simon Nathan*

Startled by the Cometa's features? See the article beginning on page 22 of this issue, where we report in detail on Russian 35-mm cameras today—including a panoramic camera and a remarkable rapid-sequence 35.

from the Polaroid Land camera method of opening the camera back. Instead of a pull-out lever, which is somewhat awkward, the Moment has an easy-to-use push-button release.

Quality of results

Pictures made with the Moment and the "film" supplied for it are not nearly comparable in quality to those obtained with Polaroid equipment. My personal results with the Moment were so disappointing that I lent the camera to several other photographers to see what they could do with it, just to be sure that I was not being prejudiced in my attitude. Here are some typical comments I received:

1. It is a feat of strength to pull out the used negative for bringing a subsequent picture into its processing position. The film often jams.

2. About one in eight of the processing pods of the rolls supplied did not burst, resulting in blank shots.

3. Prints are difficult to remove from the camera. They seem to be physically stuck to the negative. I had to use a knife to release the prints, often causing tears in the paper.

4. Rarely does the processing solution spread evenly. Thus, the positive prints almost always show streaks, spots, and non-uniform areas.

5. When prints are removed from the camera there is an excess of processing "paste" which has to be removed.

6. There is a tendency for the process to give prints that are not uniform in color. A few prints obtained were neutral-black overall, but most prints had yellowish spots and mottle.

7. The film is very slow: equivalent to an exposure index of about 40 at most.

8. Prints produced are very soft in contrast. Poor detail and tone reproduction, inadequate separation of values.

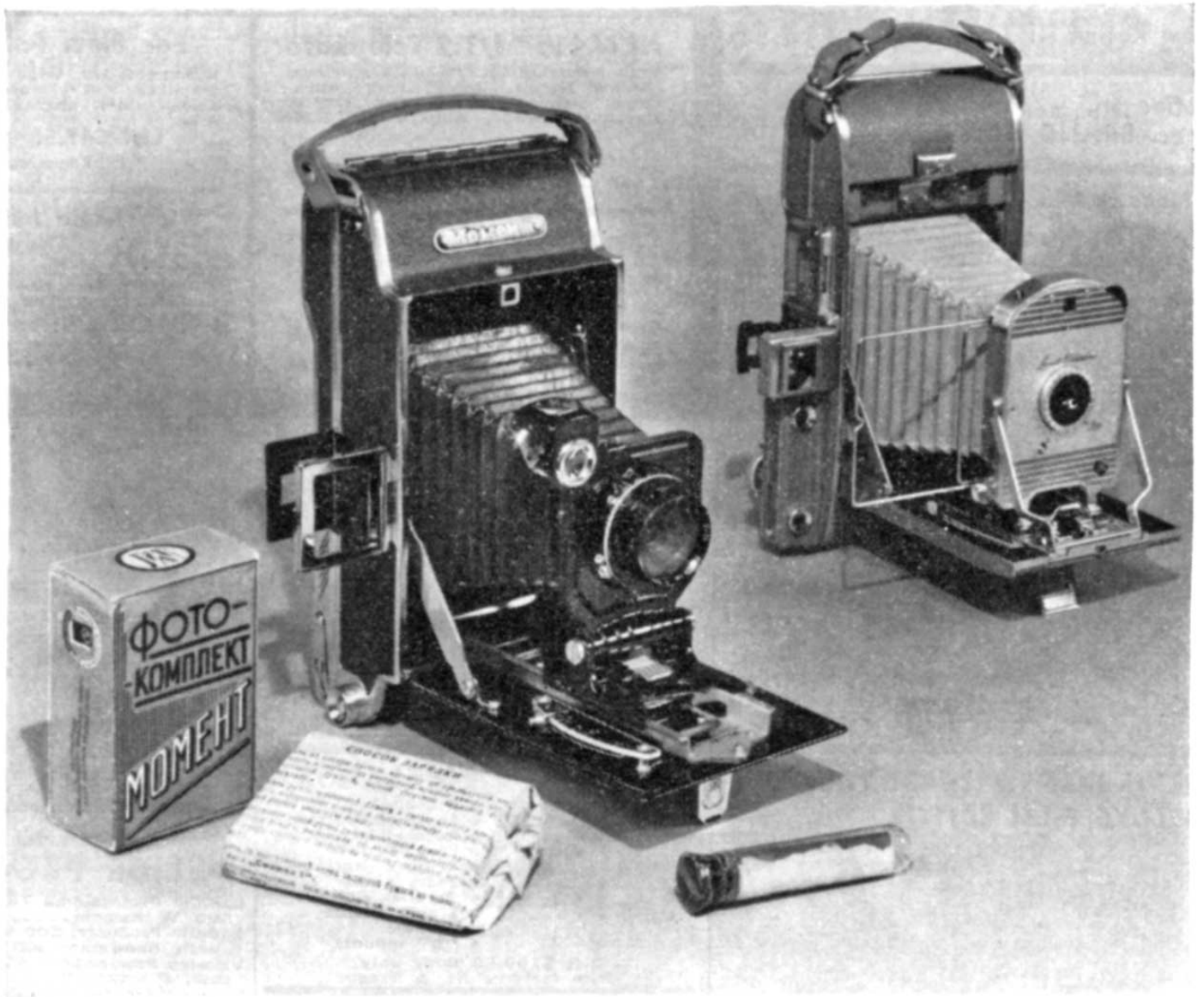
9. Fading of prints occurs within three to four hours in some instances.

10. I got the same deckled edge on the prints, but not the same picture quality by a long shot.

—LLOYD E. VARDEN



New Russian Camera Takes Pictures in a Moment



Land's Polaroid camera at *right* compares favorably with Russian "Moment," *left*.

The best way to pay a compliment, so the saying goes, is to imitate. If true, then the Polaroid Corporation should feel highly honored, because their camera and one-minute picture process have been imitated by the Russian photographic industry.

The Russian version of the Polaroid Land camera apparently was introduced in the early part of 1955. But the first description of it that I read—from a translation, of course—appeared in the December, 1955 issue of *Nauka i Zhizn* (*Science and Life*, a Russian-language scientific magazine). The article was written by D. Bunimovich, under the title "Fast Photography." His claims for the camera (and process) were so close to those made by Polaroid that I was enticed to place an order for the camera and a dozen rolls of film through a European dealer. This proved to be an unsuccessful approach, but eventually I did manage to get the camera and films for tests via another source. It wasn't easy!

Comparison of one to the other

As is evident from the illustration above, the Russian "Moment" camera is definitely patterned after the Polaroid Land camera. Close examination, though, shows many differences.

First of all, however, it should be stated that the camera itself is not just a cheapened copy of the American

equivalent. There are differences, but the materials are of fairly good quality and the workmanship is comparable. The main shortcoming of the Russian effort to duplicate the Polaroid one-minute picture system, which I shall discuss later, is found in the *results*. It must be recognized that in a process of this type, the camera *and* film must be considered as a unit. (By "film" I mean the negative material, the composition of the developing pod, the positive print-forming material, etc.) Therefore, in comparing the Moment camera with the Polaroid Land cameras, comments favorable to the Moment can be misleading unless this is kept in mind.

Now let's get down to facts. The Russian Moment is a very good copying job. It is somewhat bulkier than the corresponding Polaroid Land camera, due to the use of a lens and shutter design that requires greater space than the compact lens and shutter system adopted by Polaroid. But the camera as a whole is fundamentally the same as the Polaroid Land camera. As a matter of fact, the camera back is an almost perfect duplication of the Polaroid Land camera. The rollers, pressure plates, etc., appear to have been purchased from Polaroid suppliers. But I am sure they were not.

The Russian designers introduced one difference, however, which in my opinion is an improvement. They deviated

НАСКОЛЬКО ХОРОШИ РУССКИЕ КАМЕРЫ?*

* HOW GOOD ARE RUSSIAN CAMERAS?

RUSSIAN CAMERAS are hardly new to American camera fans. GIs during World War II came back from Europe with many a Fed (copy of the pre-war Leica IIIa) and even a few Kiev cameras (copies of Contax II and III). They're still around, littering up the shelves of used camera dealers.

However, the Russians haven't been exactly sitting still in camera manufacture. Recently, plans were made to begin importation of Russian-made cameras into Canada. MODERN sent for a catalog and found that things have improved somewhat since the old Fed and Kiev days. The Fed seems to be out of production, the Kiev is still available. However, in thumbing through the catalog we discovered two completely new camera designs. They looked quite interesting. We obtained new samples of them from the importer, Ukrainska Knyha of Toronto, for testing. Many photographers who had seen these Russian cameras were willing to tell us

about them, but we felt if we were going to find out how good they were we'd really have to get samples and do the testing ourselves.

The Zenith-C 35mm single-lens eye-level reflex camera sells for \$99.50 in Canada. The camera body itself resembles a pre-war Leica IIIa and features a removable base plate. The lens thread is Leica, but the non-preset, non-click stop f/3.5 50mm lens cannot be interchanged with Leica lenses since the lens mount to film distance is far greater on the Zenith-C than on a Leica.

Shutter speeds are quite limited; 1/25 sec. is the slowest. The internal mirror is spring loaded and flies upward when the shutter release is pressed. The shutter cannot be called quiet. The small film wind and frame counter knob is hard to turn when the camera is loaded.

The prism image is brilliant—very bright and sharp right to the corners. Somehow, the manufacturers have



SINGLE-LENS REFLEX: INEXPENSIVE ZENITH-C

Aside from a brilliant prism finder, American camera fans would find the Zenith-C hopelessly lacking in features now common to all single-lens reflexes made in Western Europe and Japan. Slow speeds, click stops, rapid wind and rewind levers, good finish do not exist. There is no automatic or semi-automatic diaphragm. The lens has no pre-setting mechanism. Loading the Zenith proved difficult. Lens was sharp wide open and speeds 1/25 to 1/500 were accurate.

RAPID SEQUENCE LENINGRAD 35MM

All sequence cameras are noisy and the Leningrad is no exception. However, 12 shots can be made in less than 6 seconds after winding the spring motor fully. The rangefinder is brilliant but the secondary split image sometimes becomes difficult to line up with the main image. Frames for 50, 85 and 135mm lenses seen through viewfinder were extremely sharp and clear. Rewinding film was hard.



accomplished this with a relatively small aperture f/3.5 lens, without using any Fresnel lens in the viewing system. There is no split image rangefinder and the prism is non-interchangeable.

The lens was quite sharp at full aperture. The mount is of some light aluminum alloy and allows a close focusing distance of about 2½ feet. The satin chrome finish is quite good, but the black enamel chips easily. The leatherish plastic finish is very durable.

The three outstanding plus features of the Zenith-C are the low price, small size and brilliant viewfinder. The price perhaps reflects the lack of features—click stops, slow speeds, preset or automatic diaphragms that we've come to feel are really essential on similar cameras sold here. The viewfinder remains a real asset. Although the camera features an interchangeable lens mount, no interchangeable lenses are listed for it in the catalog. Incidentally, various staff members experienced considerable trouble loading the Zenith. The take-up spool didn't seem to want to wind film.

Let's turn now to the second, somewhat more professional 35mm camera MODERN was actually able to test, the Leningrad. The camera is about the size of a pre-war Contax II. By turning the large top knob 33 times, you can fully wind the rapid sequence spring which pulls about 12 full 24 x 36 frames through the camera as fast as you can press the shutter release. The spring does not wind all the way down. After the first 12 shots, about 15 to 20 turns of the knob will rewind the spring fully.

The rangefinder-viewfinder is quite unlike any here in the U.S. It's a split image type. Instead of showing a second, superimposed image in the central rectangle as most 35mm cameras, the central section has a single movable image which must be aligned with the stationary image at the edges of the rectangle. If you have a still subject with clearcut vertical lines, focusing is no problem. Lining up a subject without clear verticals is downright difficult.

The finder window itself is extremely brilliant. There

are three clearly outlined black frames showing the fields of view for 50, 85 and 135mm lenses. They are not parallax corrected.

This interchangeable lens has a Leica thread. All Leica thread lenses will fit the Leningrad and work with its rangefinder. The Jupiter f/2 50mm lens is not too sharp by our acceptable standards when wide open. The lens mount is rather rough in finish. It has no click stops.

The focal-plane shutter speeds 1 to 1/1000 sec. are governed by a single shutter speed dial. A speed check indicated that the speeds are quite consistent. The back and bottom of the camera comes off in one piece by turning a key on the right side of the bottom plate and unscrewing a knob on the left side. The camera back is a rather light metal pressing. The tripod socket is formed of an external piece of metal quite similar to the ones Zeiss discarded with the pre-war Contax II. Taking the back off or replacing it is hardly an instantaneous operation.

Taking pictures with the Leningrad was difficult at speeds less than 1/100 sec. since there was considerable shutter jar at first. After some use, the jar softened, then disappeared completely. The spring drive mechanism was no louder than on similar sequence cameras made elsewhere.

Rewinding film in the Leningrad is an experience. Instead of a rewind button or lever, there's a thumb pressure recessed screwhead on the camera bottom that must be turned until the spring loaded take-up drum becomes disengaged. Then you can rewind the film using the very large rewind knob atop the Leningrad. Several times, the rewind mechanism became difficult to disengage and the camera had to be taken into the darkroom to unload.

The overall finish and appearance of the Leningrad was considerably higher than the Zenith eye-level reflex. Oddly enough the rather large camera body was easy to hold at eye level. Apparently, the designers have deliberately molded (Continued on page 114)

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the body to make the camera easier to hold. For instance, the left side of the Leningrad has a sloping protrusion which doesn't seem to have any mechanical use. It makes an excellent finger grip, however.

The price of the Leningrad with 50mm f/2 lens is \$289.50 in Canada.

Aside from the two cameras MODERN was able to test for a month (neither broke down in use), the catalog from Ukrainiska Knyha does list two Zorki 35mm cameras at about \$99.50, which look like poor imitations of the Leica D (50mm f/3.5 lenses, separate rangefinders and viewfinders and no slow speeds), a Moscva 2 $\frac{1}{4}$ x 3 $\frac{1}{4}$ rangefinder roll film folding camera (a cross between a Super Ikonta C and rangefinder Bessa), \$49.50, a Lubitel-2, as close to a pre-war Voigtlander Brilliant non-focusing 2 $\frac{1}{4}$ x 2 $\frac{1}{4}$ camera as you can come without putting the name Voigtlander on it, \$23, and finally a Smena-2 35mm camera with f/4.5 lens and no rangefinder. This is an original design.

Can we draw any conclusions about Russian cameras? By and large, the roll film and 35mm instruments are still copies of obsolete German cameras of pre-war vintage. Here and there, a brighter prism or unusual viewfinder for a sequence camera indicates a growing tendency towards original engineering. Camera design and the final products, however, have a long way to go before they can catch up with the West.—H.K.