

POPULAR

PHOTO- GRAPHY

JULY • 75 CENTS



Lens faults:
how to
spot them



Special:
16 pages
of color

Are your
eyes open?

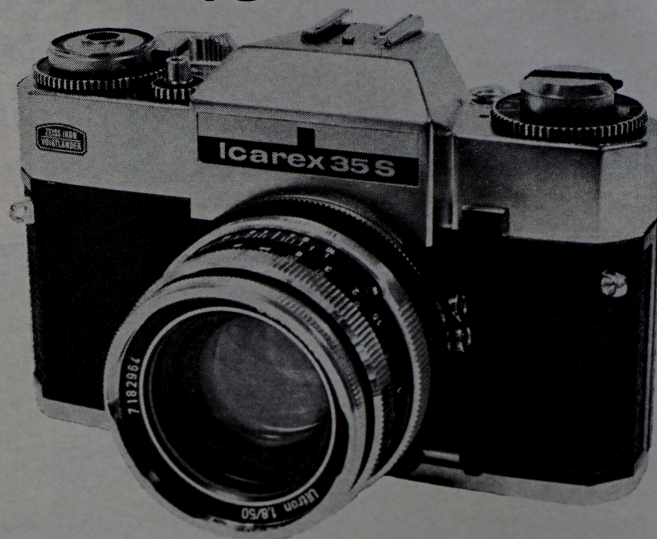
Goodbye
camera shake:
pressureless
picture-taking

Like curves?
You'll love those
fish-eyes

Lab report

ICAREX 35S

- Camera Type:** 35-mm SLR
Normal Lens: 50-mm Ultron f/1.8
Shutter: Cloth focal plane. B, 1/2-1/1,000, plus flash setting.
Viewfinder: Non-interchangeable eye-level prism with RF spot in Fresnel screen.
Exposure Meter: Through-lens, CdS; stop-down method.
Flash Synchronization: Single setting on shutter speed dial for both electronic and regular flash at 1/45.
Film Loading: Conventional.
Film Transport: Single-stroke lever.
Film Counter: Automatic reset; shows number of exposures made.
Other Features: Depth-of-field preview lever, meter on-off switch, meter window in top of camera, built-in eyepiece light shield.
Weight: 2 lb., 5 oz.
Dimensions: W. 5 3/8 in., H. 4 in., D. 3 3/8 in.
Accessories: Interchangeable lenses, filters, bellows and extension tubes, right-angle viewfinder, supplementary close-up lenses, microscope adapters, copying stand, eyepiece correction lenses, etc.
Price: \$279.95.
Distributor: Zeiss Ikon Voigtlander of America, Inc., 444 Fifth Ave., New York, N.Y. 10018.



FIELD CHECK

In this age of ever-proliferating 35-mm SLRs, my first question about a new model is, "Just where does this new camera fit into the scheme of things?" After working awhile with the Icarex 35S, I came up easily with the answer. I think it is going to be a serious contender for a slice of the medium-priced, professional camera market, as well as appeal to serious amateurs. This is my impression based on the camera's quality of construction, ease of handling, and the results it gave me during my tests in the field.

My first good reaction came when I looked into the viewfinder of the Icarex 35S. I am quite near-sighted, and wear thick glasses. But, despite this, I had no trouble seeing the entire focusing screen at one glance. I was also able to see the metering system's illuminated *f*-stop scale (located above the focusing screen) without having to twist my head. The model I used had a rubber eyecup mounted over the eyepiece. This caused me to move my eye back somewhat, but I did not lose any of the advantages cited above.

The focusing screen consists of a Fresnel groundglass with rangefinder center spot. I had to be convinced by calling Zeiss Ikon Voigtlander that a Fresnel lens was present, since I could not see its concentric lines, even with the lens stopped down. This is a great asset, since a focusing screen should be a place not only for judging focus, but also the esthetic qualities of the image. Fresnel lines are no help in such matters.

The rangefinder in the center of the groundglass is set at a 45-degree angle, making it easy to match up either vertical or horizontal straight lines, without having to turn the camera on its side. The meeting place, or center line between the two rangefinder prisms, is clearly defined, with neither overlapping nor space between the images. Thus, when an object is brought into correct focus, the image looks continuous and clean. I like this characteristic.

When no clearly definable subject contours were available

for use in rangefinder focusing, I switched to the surrounding Fresnel screen. The image seemed quite bright, even though the lens was an *f*/1.8 rather than the *f*/1.4 that I've become accustomed to. Comparison with one or two other cameras having *f*/1.4 lenses confirmed my feeling that here was an exceptionally bright finder indeed. The image snapped in and out of focus without any trouble.

A depth-of-field preview plunger, also used in through-the-lens metering operations, is located just behind the lens on the left side of the body. It may be pressed in gently for a quick look or pressed in hard to lock it for an extended view.

The viewfinder also contains the metering match needle in the right center of the focusing screen, centered in a V-shaped notch. This is part of a black, M-shaped protrusion into the picture area. Surrounding this is an illuminated line that makes it easy to center the needle in the notch, even when the picture area on that side is in relative darkness. The protrusion of the metering notch into the picture area was not great enough to make composition difficult. The *f*-stop settings are continuous, with no click stops. This makes for a smooth continuous movement, that in turn makes it easy to center the needle precisely to get the right exposure.

The meter is powered by a PX-13 mercury cell or equivalent located in the base of the camera. It takes two actions to turn the meter on. The first is to swing the film transport lever to its "ready" position. Next is to push in the depth-of-field preview plunger on the left side under the lens. An essential difference between the metering systems of the Icarex 35 and the new 35S is in the fact that the meter is coupled not only to the diaphragm but also to the shutter speed dial on the newer camera. On the previous model with detachable, accessory metering prism, the shutter speed had to be set not only on the speed dial, but also on a dial atop the prism. The new arrangement makes it easier to (continued on page 132)

OLD YOUNG LION from page 130
one who filmed white demonstrators and onlookers. The cameramen—Mike Wadley, Richard Adams, and Adam Giffard—were volunteers who used their own equipment: two Eclairs and a converted Auricon, operated with synchronized Nagra tape recorders.

The film is different from most productions dealing with civil rights/black power/anti-war demonstrations in that no black leader speaks.

"The TV image of black leaders, with statements torn out of context," says Weiss, "gives the impression that they are demagogues—that they go to Harlem to heat up their people with firebrand talk.

"I wanted to show that the leaders don't impose their views, but rather reflect feelings that come from the streets—from people like those we filmed: a cook, a housecleaner, and a man dancing by himself in front of a bar. We learned that audiences were shocked to find that these people expressed, articulately and with emotion, the connection between their depressed lives and the war in Vietnam."

The three principal spokesmen are black but they are not black leaders; they are Vietnam veterans who express their opinions about the war, poverty, and the black revolution. Weiss feels that they speak for the people in the ghetto, who are writing a new chapter in American democracy by rejecting all forms of oppression and discrimination.

After the footage was shot, Paradigm Films invested \$17,000 to complete the film, with Weiss as producer-director. (Paradigm's founders, Mike Wadley and John Binder, were the main cameraman and soundman, respectively, of both of Weiss' productions.) From 20,000 feet of film, about 8,000 were selected and edited. Ten weeks of editing by Weiss and Binder pared the footage to 2,450—running time, 68 minutes.

"We made a ruthless selection of material," Weiss recalls. "Many scenes that were good in themselves had to be cut out. Others had to be eliminated to assure artistic unity. We tried to cut with simplicity, so we avoided cinematic pyrotechnics and montages. We wanted to convey the feeling that this came from the streets rather than from artistic imagination. My co-editor and I allowed shots to play themselves out and let people develop on the screen as real human beings."

"No Vietnamese Ever Called Me Nigger" was shown for the first time at the 1968 Robert Flaherty Film Seminar. It was presented in the special events program at the New York

Film Festival and at festivals in San Francisco and Chicago. At Mannheim, Germany, it won the award for long documentaries.

Variety called it "superior cinema journalism." The *San Francisco Chronicle* stated that it "should be seen by every politician in the United States and by as many citizens as possible, for it now quietly, now amid angry shouts, explains just why tensions will continue to build toward inevitable violence unless something is done, and done quickly."

Although the documentary has been sold to German, Dutch, and Belgian television, Weiss thus far hasn't collected a cent for his work. When he does, it won't be enough to free him from his proofreader's job at *The Times* on the 6 p.m.-to-1:20 a.m. shift. Sometimes he cuts his work week from five nights to three or four, so that he can work on his movie projects instead.

"I suppose that if I simply wanted to work in the film industry as a director or editor, I could become a professional film maker," says Weiss. "But my aim is to make films that flow from my own feelings and ideas.

"I've got a lot of ideas and no budget for any of them. If I had the money, I'd like to do a dramatic feature because dramatic films have far greater impact and range than documentaries . . .

"I know I can direct actors but I don't expect anyone else to know this. It's a big leap from documentary to dramatic film making—ininitely greater than the jump I made into documentary films. One way or another, I've got to find a way to make that leap . . ."

ICAREX 35S from page 122

read the light, whenever a shutter speed change is needed. As you may have surmised, metering in the new 35S is by the stop-down method.

The diaphragm ring, focusing ring, and the stop-down plunger are neatly clustered so that you can easily and quickly carry out all operations with your left hand alone.

In addition to the metering needle in the viewfinder, there is also one on top of the camera, next to the rewind lever. This can be very useful with the camera mounted on a tripod or copying stand, where it might not be convenient to peek repeatedly into the viewfinder. Surrounding the meter needle window atop the camera are a collar and lever that operate a mask to prevent stray light from entering the viewfinder when the camera is tripod-mounted. A serrated, click-stopped wheel surrounding the shutter release lever is used to select film

speed ratings from ASA 25 to 1,600 and DIN 15 to 33.

At ASA 100, I found it possible to make readings down to 1/2 second at f/1.8; shutter speeds range from 1/2 to 1/1,000. These are set on a click-stopped dial under the film-transport lever. In addition to the speeds named, there are also one for flash and electronic flash (marked by a yellow lightning symbol) and B.

I am not as happy about the location of these settings on the dial as I am about the other camera features. The electronic flash setting comes after the 1/2 setting, while B clicks into place after 1/1,000. This could become confusing when you are trying to change speeds in a hurry, or in the dark, unless you have a good memory and count clicks to keep track of just where you are.

The yellow lightning symbol on the shutter speed dial is used for both flashbulbs and electronic flash. At this setting, the shutter speed is 1/45.

The quiet shutter and a relatively bang-free mirror action are reassuring to available-light photographers.

Lenses on the Icarex 35S are in an interchangeable, breech-lock bayonet mount. In addition to the 50-mm Ultron f/1.8 lens, there is also a full stable of lenses including a 35-mm Skoparex f/3.4, 90-mm Dynarex f/3.4, 135-mm Super Dynarex f/4, 200-mm Super Dynarex f/4, 400-mm Telomar f/5.4, and the first-of-its-kind 36→82-mm Zoomar f/2.8 zoom.

The names may well seem familiar to you, since they derive from tried and tested lenses from the Voigtlander Bessamatic and Ultramatic lens group. The 50-mm Ultron f/1.8 lens I worked with had a 50-mm diameter bayonet-filter mount. This mount is also to be found on other Icarex lenses up to 200-mm. The 400-mm Telomar and the Zoomar take 77-mm diameter filters or adapter rings. I found no thread on the lens mount for attaching non-Icarex filters.

The Icarex 35S loads conventionally, but has a real feature in the automatic resetting film counter, visible in a window on the camera back, under the film transport lever. This rotates only when film is actually traveling across the film gate, giving you a great feeling of security.

When you rewind there's also security, since the counter also operates backwards—but only if the film is actually rewinding. Should you accidentally tear the film off the spool, the counter will not operate.

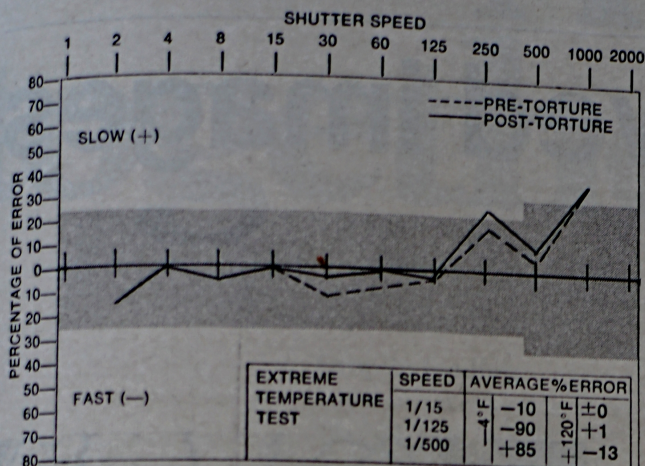
The Icarex 35S impresses me as having the same fine finish and ruggedness that one expects to find in a camera made by the makers of the Contarex SLR.—Norman Rothschild

INSTRUMENT READOUTS

CAMERA: ICAREX 35S No. 69361

LENS: 50-mm Ultron f/1.8 No. 7182964

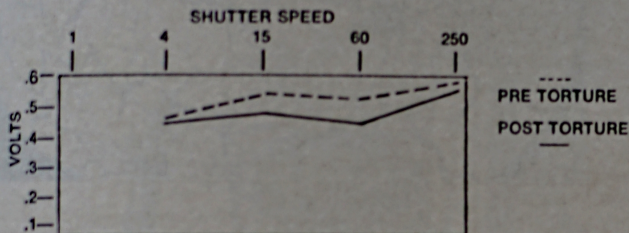
SHUTTER PERFORMANCE: Top speed is out of tolerance—a frequent occurrence among the cameras tested to date.



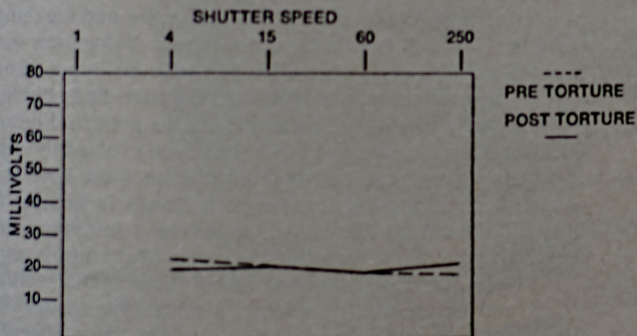
Suggested USA (formerly ASA) shutter accuracy standards are shown by shaded area. Higher speeds have more tolerance.

SHUTTER TRIP AND TRAVEL: Release is stiffer than the mean.

VIBRATION LEVEL: The highest of any 35-mm SLR so far lab-tested.



NOISE LEVEL: The Icarex 35S is one of the quietest 35-mm SLRs.



Noise and vibration standards do not exist, but relative levels become evident when charts for several cameras are compared.

METER SPECIFICATIONS:

Type: CdS	Zeroing provision: No
Accuracy: Within 1/2 stop	Parallax: None
ASA range: 25-1600	Battery test: Yes
Acceptance angle: Same as lens	
Response discrimination: Good	
Accessories: None	Scale legibility: Fair
Movement balance in various positions: Good	

LENS PERFORMANCE: The first impression one gets from looking at this lens is that something dreadful has gone wrong in its assembly. The front element (as everyone knows) should have its outer surface convex (bulging out), but this one is concave (bulging inward)! One look *through* the lens and all doubts are removed, because this lens performs superbly. Star tests show all residual aberrations to be of very low magnitudes. Longitudinal chromatic aberration was as low as I've seen to date, and lateral color was not detectable.

Astigmatism was also unmeasurable except at full aperture at only one point in the field, and even here the values were so low that they can be ignored. Focus shift because of spherical aberration amounted to a mere 0.05-mm between f/1.8 and f/5.6—one of the lowest figures for this aberration yet measured in my testing. A slight amount of rectilinear distortion was noted near the edge of the field. Coma-produced flare was gone completely by f/5.6.

Electronic bench tests showed the lens to be very high in contrast. Values recorded were among the highest in my experience. The optimum aperture is f/5.6, but performance at f/2.8 equals that of most other lenses of its type stopped down to f/5.6. At f/4 this lens exceeds the optimum performance of nearly every other lens of its type tested. Performance at infinity was better than at close distances.

Conclusion: Maybe more lenses should have their front surfaces dished-in. This one could give lessons to a lot of the others.

MISCELLANEOUS DATA

	PRE-TORTURE	POST-TORTURE
Focusing System: SLR w/ split-image RF, Fresnel screen		
Range	18 in.-∞	18 in.-∞
Accuracy over range	∞ 5M 1M	∞ 5M 1M
	OK OK OK	OK OK OK
Shutter-trip force:	600 gm	590 gm
Shutter-trip travel:	2.5-mm	2.5-mm
Self-timer:		
Minimum	1 sec	1 sec
Maximum	7 sec	7 sec
Viewfinder:	Eye-level pentaprism	
Framing Accuracy	OK	OK
Parallax Corrected	—	—
Synchronization:	Std. PC outlet	
Flashbulb	10 msec	11 msec
Strobe	0.0 msec	0.0 msec
Contact Resist	0.05 Ω	0.1 Ω
Insulation	OK	OK

STRIPDOWN REPORT

	Interior	Exterior		
Material choice:	Good	Good	Modular construction?	Semi-
Assembly, Finish:	Good	Good	Replace key parts easily?	Yes
Repair access:	Good		Seal against dirt:	Fair
Adjustment provision:	Good			
Do frequently made adjustments require major stripdown?	No			

Comments: There are so many design innovations that it's hard to single out the few we have space for. Start with the counter. It's not the conventional disk with numbers on its rim, but a tiny drum with an end of a printed tape fastened to it. As the film is transported, the drum gets nudged by the top half of the film-drive sprocket so that it turns a small amount with each frame. As the drum turns, it pulls the printed tape off another tiny drum on which the tape is stored.

The 35S shutter employs the principle of the varying-width slit, but not through the action of the opening curtain unlatching the closing curtain. The retarding gear train (reserved in most other cameras for slow and intermediate speeds) is used to govern *all* the shutter speeds (even the 1/1,000). This makes for a greatly simplified shutter-speed timing mechanism and, at first glance, I had doubts about it.

But my suspicions were based on my familiarity with conventional designs; this new system seems to be entirely workable.

The mirror employs no damping device, going up or down—a disappointment only partially offset by the fact that its geometry of upward motion makes it somewhat self-damping. There is no provision for insuring that the mirror is out of the way (fully swung up) before the shutter trips. In fact, it's possible to reach into the camera (lens removed) and block the mirror from rising altogether, as the camera is tripped. The shutter still releases—a philosophy I disapprove of.

The neatest trick of all is the mini-periscope incorporated on the front of the pentaprism and peeking out of the top-cover. This images the diaphragm control ring on the top of the lens, so that it's displayed over the top of the frame in the viewfinder.

Conclusion: Once in a great while, a camera appears with some really new design features. When they are well done (as on the Icarex 35S) they may well become some of the new "conventional" features that will appear on future cameras.—Norman Goldberg