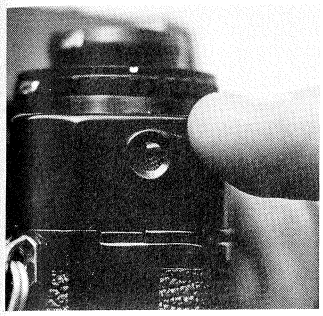
tery manufacturers themselves do not recommend any silver-oxide battery use below freezing.

The battery test lever and red lamp on the left edge of the XE-7 are similar to those on the XK camera and are very welcome.

The newest Rokkor-X lenses on all Minolta SLR's have the red, raised attaching dots for sight-unseen ease of mounting, well-marked green footage and white meter numerals (although we'd rather have 'em the other way around), clear depth-of-field and aperture scales, plus an excellent heavily-studded rubberized focusing ring. The aperture-setting ring has the usual MC lug,



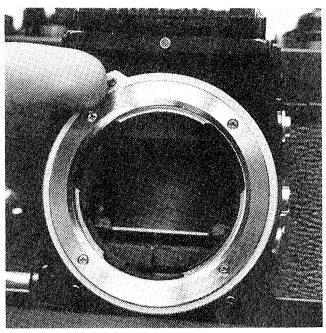
If batteries are O.K., pushing down lever on left end of camera will light red signal at hub.

which makes contact with the aperture-setting ring pin on the camera itself. We judge this ring to be one of the more delicate parts of the Minolta SRT and XE-7 cameras (the XK uses another system). On earlier non-X Rokkors having MC coupling, the barrel diameter was somewhat smaller and thus the aperture-setting ring was exposed. The ring could possibly be damaged or accidentally held by the user in this exposed position. Even the slightest bend tended to make the ring stick, thus creating incorrect meter settings. In the Rokkor-X lenses Minolta designers have overcome this problem by using the larger-diameter barrels which completely cover the ring when the lens is mounted. When the lens is not attached or when other lenses are used, be very careful of this ring.

The mirror chamber of the XE-7 is somewhat the same as on the SRT's, with heavy anti-reflection ribbing at the bottom. However, the side ribbing has been replaced with a matte black coating material, but this seems to work as well. The mirror itself is the same overlarge size used on all modern Minoltas to prevent any mirror cutoff in the finder when close-up equipment or lenses up to 1600mm are fitted.

Three additional Minolta XE-7 features must also be mentioned. The film-reminder pocket at the rear (which has an ASA-DIN conversion chart printed on it) accepts even large film box ends (meaning Kodak) without the need for box-end trimming. The now-standard (on Minoltas), specially-designed neck-strap ring triangles prevent any possible unwanted loosening from the camera. Lastly, and possibly most important, the adoption by Minolta of a tough, almost indestructible plastic housing over the prism prevents any damaging or denting of the prism housing which is all too often encountered with other SLR's.

All these individual features really work effectively together in actual use. It was a delight to see

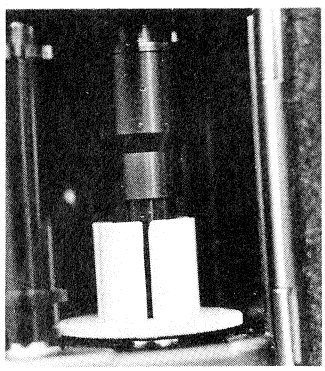


Meter-coupling pin ring around lens mount is similar to that on SRT cameras, and should be treated carefully.

all the needed information within the finder at all times. After it is pulled out an initial 30° from the camera body to operating position, the rapid-wind lever makes an exceptionally smooth and effortless arc of 130°. The shape is splendid; our only complaint is that we would have liked it to be geared so that it could wind in two or more short strokes instead of only one.

The camera focused with fine discrimination and we were able to change lenses easily and swiftly (once we became used to the better lens-release button on the lens mount instead of the more flimsy and definitely less easy-to-use knurled button of the SRT cameras).

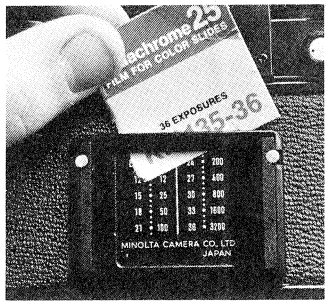
Film was easy to load. The white four-slotted collar with teeth (around the take-up spool) caught the film leader easily. A few swift turns of the knurled spool ends moved the film so that both sets of sprocket holes were over the sprocket teeth. The back closed with authority. Rewinding with the good-sized folding crank and ribbed plastic



Four-slotted, take-up-spool collar is very convenient, as are knurled spool ends for tightening film.

handle was splendid. The camera, like other Minoltas, opens when you pull up smartly on the rewind knob.

But the real icing on the camera was that shutter release. More often than not, you simply couldn't hear the camera under general shooting conditions. It was a soft decisive noise with no after-ring or clatter. It caused little vibration. The mirror damping was also obviously well done



Film-reminder pocket at back holds box end without trimming.

and contributed to the lack of noise or jar. We've waited a long time for SLR's to catch up with the quietness of rangefinder cameras. In the XE-7, we've just about got it.

While our pictures, taken with both slide film and black-and-white, were all that we could ask for, we were naturally anxious to check shutter and automatic-exposure accuracy in our lab and then go on to a test of the well-known 50mm f/1.4 Rokkor-X lens which was provided with the test camera.

Using our Kyoritsu FL-4DM2 shutter testing machine, we found that all marked shutter speeds were accurate to within 15 percent—and most were even more accurate. Measurements of exposure accuracy at the film plane using our Kyoritsu auto-exposure test apparatus confirmed the high level of accuracy of the XE-7's metering/ auto-exposure system that was apparent on our test slides. At all film-speed/ light-intensity/aperture combinations tested, the auto-exposure system delivered exposures accurate to within ⅓ stop.

Turning now to the 50mm f/1.4 Rokkor-X, here's what our optical bench and Kodachrome test slide analysis revealed:

Central image quality: Central color fringing was judged to be quite well corrected. It was prominent on the bench only at maximum aperture, and wasn't disturbing at any aperture on our test slides. Central spherical aberration produced an average amount of flare wide open, but came under control quickly as we stopped down, disappearing for all practical purposes at f/4. Focus shift was 0.07mm, somewhat on the large side but within acceptable tolerances.

Edge image quality: Lateral color was exceptionally well corrected, being virtually invisible on both the bench and slides. Moderately large astigmatism was observed in the outer ⅓ of the picture area at f/4 and wider apertures. It was substantially reduced at f/5.6. Coma appeared rather well controlled; flare was prominent only at f/1.4.

Would you like to test your own lens? Get MODERN's Lens Test Kit, $4.50. Write to Lens Test Kit, MODERN PHOTOGRAPHY, 2160 Patterson Street, Cincinnati, Ohio 45214.

Resolution Power

50mm f/1.4 Rokkor-X No. 3769819 At 1:50 Magnification				
f/no.	Center Lines/mm		Corner Lines/mm	
1.4	V/Good	50	Exc.	40
2	V/Good	56	V/Good	45
2.8	Good	63	Good	50
4	Good	63	V/Good	56
5.6	Good	63	V/Good	63
8	V/Good	70	V/Good	63
11	V/Good	63	Exc.	56
16	V/Good	63	Exc.	56
Actual Focal Length: 51.7mm				

Image Contrast

50mm f/1.4 Rokkor-X No. 3769819 At 30 lines/mm				
f/no.	Center Percentage		Corner Percentage	
1.4	Medium	48	Medium	30
2	Medium	56	Medium	38
2.8	Medium	67	Medium	44
4	Medium	70	Medium	51
5.6	High	73	High	53
8	Medium	68	High	65
11	High	64	High	56
16	Medium	57	High	55