LEAN AND MEAN

Fast, Compact, Full-featured Rangefinder Cameras

By Joe McGloin

With a background in photography, I'm frequently asked my opinion when a friend is considering a new camera purchase. Without any hesitation, I always recommend that they trade in their old clunker for one of the new auto-everything cameras. After all, newer is better, right? Well, it is for me anyway, since there's a bonus for me everytime someone buys a "new and improved" model. No, I don't own stock in any camera company or import firm. But with every new camera purchase, the demand for older cameras drops like lead — along with the price. Incredible cameras that, just a few years ago, were a costly luxury are now inexpensive and very easy to find, as more and more people "trade up."

One group of cameras that I find particularly irresistible are the fast, compact, full-featured, 35mm rangefinder cameras. They are truly the "take-everywhere, do-anything" cameras. By fast, I mean a lens with an aperture wider than f2.0. By compact, I'm talking about a full-frame, 35mm camera body less than 5" wide and 3" tall. By full-featured, I refer to a camera with both manual and automatic exposure control, a sensitive meter, a self-timer, rangefinder focusing, tripod socket, cable release connection and hot shoe. By themselves, none of these features are unusual. There are hundreds of 35mm rangefinder cameras. The majority of them are compact, many have fast lenses, most have automatic exposure, plenty include manual exposure, and many have adequate conveniences. But there are only a handful that incorporate all of these features.

My interest in rangefinder cameras goes way back. My first camera was a bare-bones 35mm rangefinder, but after it died I opted for a full-featured SLR. While I liked the features that the SLR offered, I soon found myself yearning for something smaller — but with full features. My quest for a compact, full-featured rangefinder began in earnest.

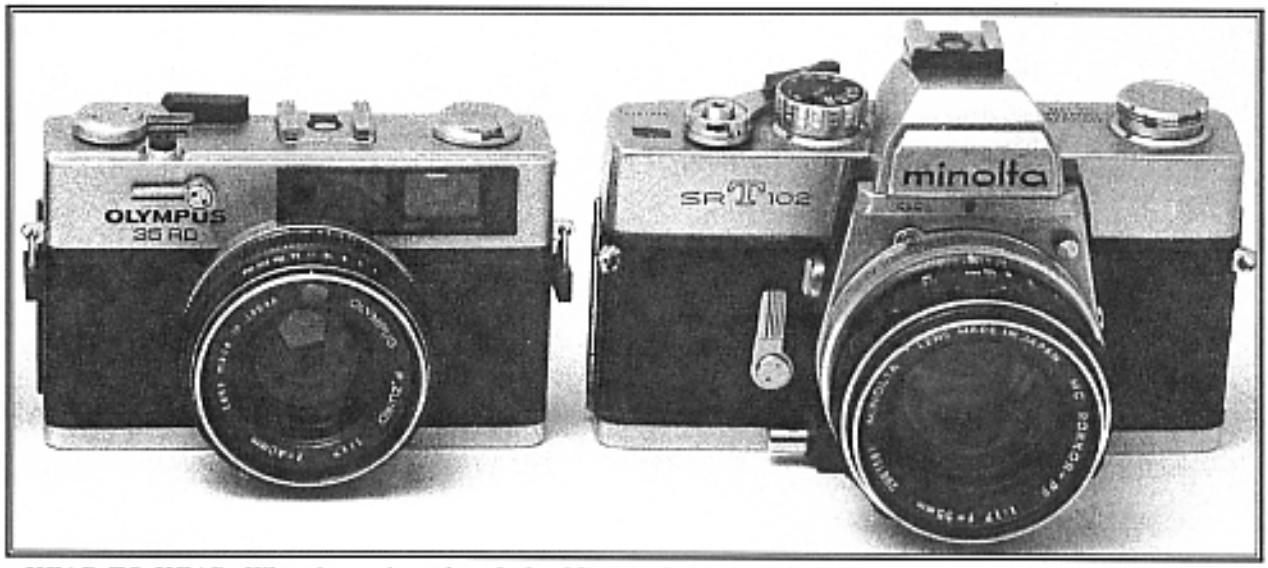
I found that the rangefinder cameras with lenses fast enough to match my SLR, such as the Konica Auto S and the Yashica Lynx series, were large and heavy. Their lug-ability and hide-ability were very limited. I might as well bring along my full-sized SLR.

Then there were the lightweight and compact rangefinder cameras, such as the Rollei 35 series, Konica C35, Fujiica GE, Petri Color 35, Olympus Pens, and Yashica 35ML. These cameras are very totable but are limited in certain situations. Either they lack manual exposure settings, don't have automatic exposure options, have slow lenses, or are not full-frame 35mm format. Feature-wise they were just no match for my SLR tank. So I drew the conclusion that no rangefinder camera had the benefits of a compact size, fast lens and full-features in the same package. In the end I resigned myself to lugging around my SLR. But, in reality, too often I just left it behind.

The 35mm rangefinder has been popular since the 1930's. Compared to the standard, larger-format cameras of the time, they were incredibly small and lightweight, yet produced good-quality images. They were an immediate hit. By the 1950's there were dozens of rangefinders on the market, but the new, single-lens-reflex cameras were starting to give the rangefinders a run for their money. The average rangefinder cost a lot less than the average SLR, but the SLR offered important advantages, such as direct viewing and interchangeable lenses. To make the rangefinders more attractive in the marketplace, manufacturers had to add significant new advantages.

Starting with the Olympus Auto Eye (1960), rangefinders added automatic exposure — several years before SLR's did (starting with the Konica Autoreflex of 1967). In addition, since the new SLR's had very fast lenses, these were put onto more rangefinder cameras as well. The Yashica Lynx 14 with its f1.4 lens appeared in 1965.

Just as important, to make the rangefinders more attractive, they were made much smaller. While the SLR's of the 1960's were

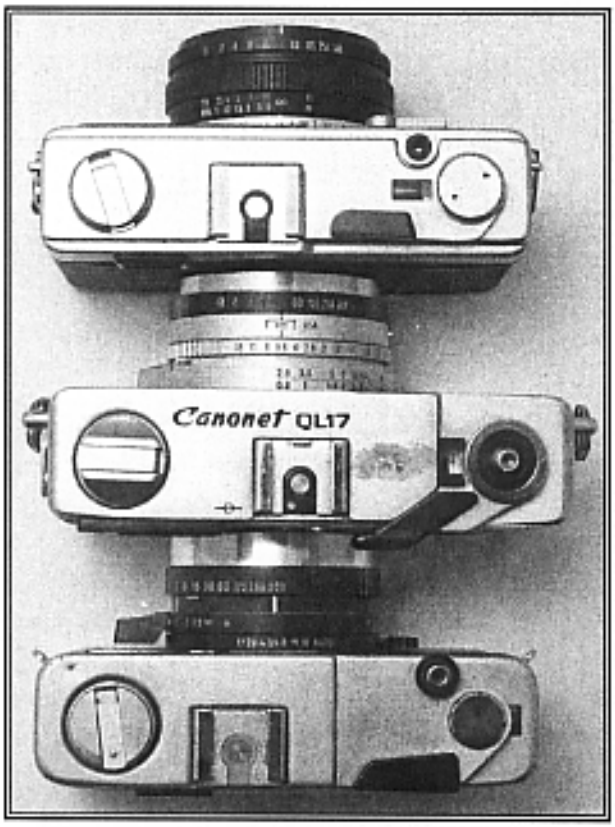


HEAD-TO-HEAD: When it was introduced, the Olympus 35RD matched the features of the top-of-the-line Minolta SRT102 except for the SLR viewing system. But the 35RD came in a much smaller package and had automatic exposure which the SRT cameras lacked.

large and heavy, the rangefinders of the period dropped substantially in size and weight. For a while, SLR sales soared. But when Konica, in 1977, announced its C35 AF — a tiny rangefinder camera with automatic focusing, automatic exposure and built-in flash — the die was cast. Shutterbugs began to realize that their expensive SLR spent most of the time in the closet because it was so big and heavy. They were willing to make the switch and the rangefinder cameras eventually won the popularity contest.

Rangefinders have continued to evolve into the popular, small, light, auto-everything cameras of today. Along the way some truly amazingly models were made. Three that stand out in my arsenal are fast, compact wonders — the Olympus 35RD, the Minolta Hi-Matic 7SII, and the Canon Canonet QL 17 G-III. Each sports an f1.7 lens, a bright viewfinder with a built-in rangefinder, a sensitive Cds meter with automatic exposure and full manual-override, all packed into a small, light, take-everywhere body. These cameras make no compromises. Other rangefinders are either large and heavy, or cut features and lens speed to reduce size and weight. But not these three musketeers. They are full-featured, fast and compact. And they can hold their own against any SLR — old or new.

These three cameras evolved with similar histories. Just like most other camera manufacturers, Canon had a complete line of full-sized rangefinder cameras in the 1960's. But Canon broke ground in 1965 with its very compact (at the time) and fast Canonet QL17 (f1.7). In the same year, they announced the QL19E, which had a similar size but a slightly slower lens (f1.9). In 1969, Canon shrunk the body of the QL17 even more. (An easy way to tell the difference between the two models is that the newer version has a hot shoe.)



The top decks on the three cameras are nearly identical. The shutter speed ring is the farthest out with the aperture and focus controls closer to the body. Top to bottom: Olympus 35RD, Canon Canonet QL17 GIII, and Minolta 7SII.

Finally, Canon came out with the QL17 G-III in 1972, which sold well into the 1980's.

In the 1960's, Minolta was also making large, heavy rangefinders, such as the Hi-Matic 7 (f1.8) of 1963 and the Hi-Matic 7S (f1.8) of 1965. By 1971 they had shrunk the Hi-Matic frame considerably when they announced the Hi-Matic E (f1.7), followed the next year by the Hi-Matic F (f2.7). Soon the original Hi-Matic 7S reappeared in a new miniaturized body as the Hi-Matic 7S II (f1.7).

Olympus manufactured two separate lines of rangefinders in the 1960's. They had a complete line of big and heavy full-frame rangefinders, such as the Olympus SC (f1.8) from 1963 and the LC (f1.7) from 1967. But they were also making the popular Pen series

of small, half-frame cameras. These were popular because they were so much smaller and lighter than regular rangefinder cameras. In 1970, they succeeded in making a full-frame camera approaching the size of their half-frame models. The Olympus RC (f2.8) was followed by the DC (f1.7) in 1971, the ED (f1.8) in 1974, and the RD (f1.7) in 1975.

The features of the Olympus 35RD, Minolta 7SII and Canon QL17 GIII cameras are nearly identical, as you can see in Table 1. The lenses are all 40mm. This slightly-wide, normal lens is great for scenics, perfect for group shots, and good for portraits, as well. All focus to less than 3 feet, with the Canon edging the others out by a couple of inches.

The lenses on the Olympus and the Canon are guide number (GN) lenses. This was an early method to get automatic flash exposure from a manual flash — the most readily available type of flash at the time. By dialing in the guide number of the film-flash combination, the lens automatically sets the correct f-stop based on the distance to the subject. Time-consuming mathematical calculations are completely avoided. The range of the GN lens is limited, so that only lower-powered flash units can be used, but this is not a big obstacle. With cameras this small you'll want the smallest flash possible — if you insist on bringing one. The Minolta lens lacks the GN feature (as well as a PC contact), but all three cameras will work just fine with today's auto-exposure, hot-shoe mounted flashes.

All three cameras have the same exposure system. A battery-powered Cds cell under the filter ring operates in shutter-preferred, automatic exposure mode. First, set the aperture ring to "A" (automatic mode). Next, select a shutter speed appropriate to the situation. Finally, compose and focus the subject in the viewfinder. The meter needle (in the viewfinder) will point to the f-stop that will be automatically selected. If the needed f-stop is out of range, the needle will fall into an over- or under-exposure zone. In this case, a different shutter speed is needed. If you prefer to work in the metered-manual mode, the steps are the same, except that after taking a meter reading, the aperture ring is manually moved to the desired f-stop setting.

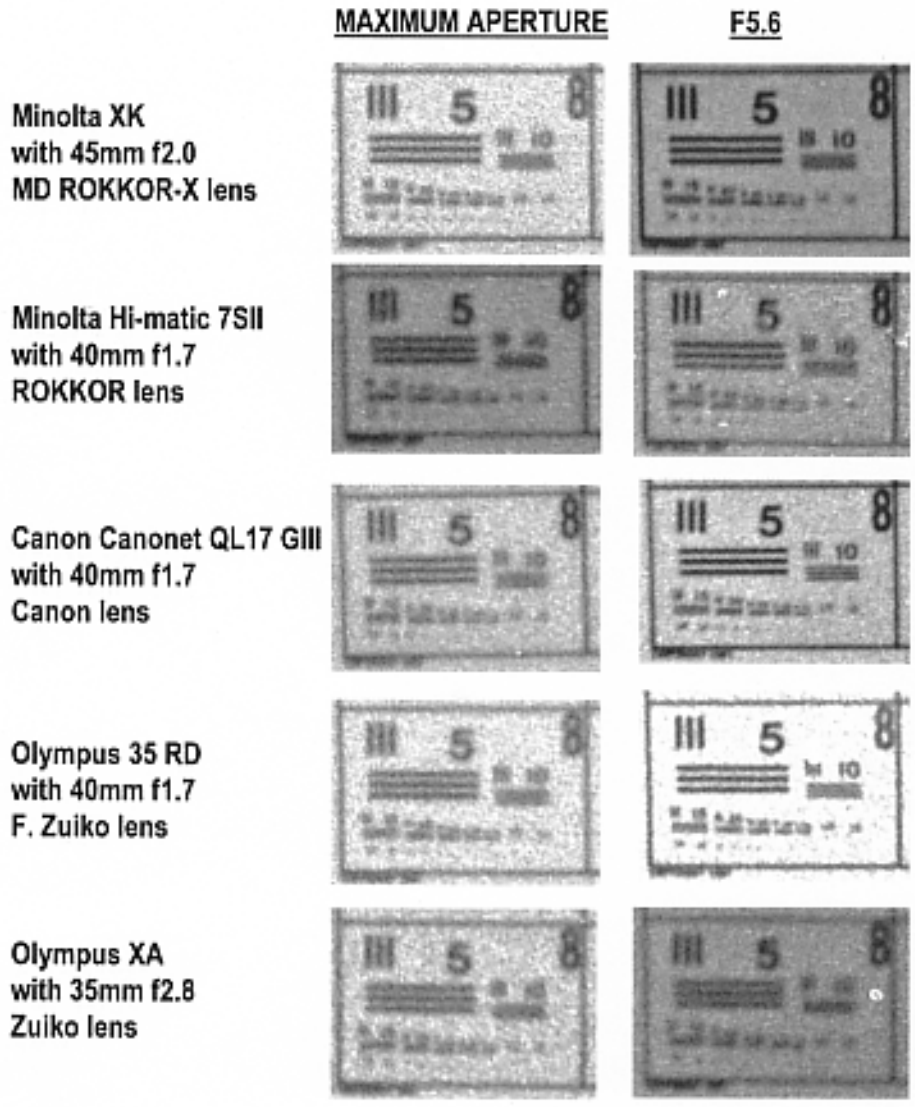
Focusing is also identical on these models. In the center of the viewfinder is a yellow box with a secondary image superimposed over the primary image. By turning the focusing ring on the lens, the images will merge and focus is accomplished. Fast and easy, these rangefinders will operate even in the lowest light levels where standard SLR's are too dim and autofocus cameras leave you in the lurch.

Other items that are the same on the cameras are the ASA range (25 - 800), self-timer, tripod socket, and cable release connection. Overall, the Canon has the most features, but it also is the largest and heaviest of the lot. The Minolta is the smallest and lightest.

The rings and finger-nail tabs on the lens to adjust the shutter speed, aperture, focusing, ASA, self-timer, and GN setting are fairly small on all of the lenses. Some accommodations have been made, however. For example, the Canon has a tab to help focus the lens, while the Minolta has tabs on the focusing ring and the aperture ring.

Given that the three cameras are nearly identical in features, perhaps a results comparison can help distinguish between them. Shots of a test target were taken with each camera on a tripod and compared after development and enlargement. A fine-grained, high acutance film (Agfa APX 25) was used and developed in D-76. The test target was exposed at the maximum f-stop

	Olympus 35 RD	Minolta Hi-Matic 7SII	Canon Canonet QL17 G-III
Lens	40mm	40mm	40mm
Maximum f-stop	f1.7	f1.7	f1.7
Minimum f-stop	f16	f16	f16
Closest focus	32"	33"	30"
GN lens	yes	no	yes
GN range	14-28	—	14-28
Filter diameter	49mm	49mm	48mm
Meter type	Cds	Cds	Cds
ASA range	25-800	25-800	25-800
Behind the filter meter	yes	yes	yes
Auto-exposure mode	shutter-preferred	shutter-preferred	shutter-preferred
Exposure lock setting	yes	yes	yes
Auto shutter speed range	1/2 - 1/500	1/8 - 1/500	1/4 - 1/500
Metered-manual mode	yes	yes	yes
Manual shutter speed range	1/2 - 1/500 plus B	1/8 - 1/500 plus B	1/4 - 1/500 plus B
"B" lockout	no	yes	yes
Rangefinder	yes	yes	yes
Aperture scale in viewfinder	yes	yes	yes
Parallax markings	yes	yes	no
Battery	625	675	625
Battery check	no	no	yes
Flash shoe	yes	yes	yes
Hot shoe contact	yes	yes	yes
PC contact	yes	no	yes
Film counter window	yes	yes	yes
Film advance indicator	no	no	yes
Rapid film loading system	no	no	yes
Self timer	yes	yes	yes
Tripod socket	yes	yes	yes
Cable release connection	yes	yes	yes
Film plane mark	no	no	yes
Width	4.5"	4.5"	4.75"
Height	2.8"	2.75"	2.9"
Depth	2.35"	2.25"	2.35"
Weight	18oz.	15oz.	21oz.
Colors	chrome only	chrome and black	chrome and black



and at f5.6 to determine the sharpest settings. For comparison purposes, additional exposures were taken with a professional camera (Minolta XK with 45mm f2.0 lens) and a quality point-and-shoot (Olympus XA with 35mm f2.8). The negatives were enlarged to 30x45 inch prints and a one inch section is reproduced here. Is short, you are looking at a print from a 1mm section of the film. Although the results look fuzzy and rather unremarkable, they are quite good considering the mural-sized enlargement.

The results are revealing, and keep in mind that the XK image required slightly less magnification, and the XA image slightly

more enlargement due to the small differences in focal length. At maximum aperture, the winner is the Minolta XK professional camera. This result is expected since this camera and lens are top-quality. What is most interesting are the great results from the other cameras at maximum aperture. They all produce very good results and in an 8x10 print would not be noticeably different from the XK results.

At f5.6, the Minolta XK still shines. But the Canon GIII show results that are slightly better. The Olympus RD and Minolta 7SII are just slightly behind, while the Olympus XA shows good, but not stellar, results. In short, when it comes to sharpness these three rangefinder cameras compare to professional gear -- not the point-and-shoot group.

To top it off, these three amigos are the perfect candid cameras. Their small size makes them very unobtrusive and easy to take everywhere. And unlike most SLR's and point-and-shoot cameras, they are all virtually silent when the picture is taken. The film can be advanced at your convenience and there is no obnoxious motor-drive or electronic flash revealing your presence. And who needs a flash anyway? With 400 speed film you can shoot to your heart's content in full sunlight, and then move inside for candlelit scenes at 1/30 at f1.7 — without a flash. And unlike the auto-everything cameras of today, these beauties will still perform even when the

With a fast, compact, full-featured rangefinder I was able to capture several shots surreptitiously in a dimly-lit bar in Barryville, New York in the 1970's. It was imperative to work quietly, in full-manual mode with the lens wide open. With most cameras this shot would have been impossible. The size and noise of an SLR would be too obvious, and a point-and-shoot can't be used without a flash in this type of situation. My fast, compact rangefinder saved the day — it caught the picture and kept me from being hung out to dry!

batteries are dead. You won't be able to use the meter, but since the shutter is not battery-dependent, you can get through almost any situation with the f-16 rule and a little bit of practice or bracketing.

After the rangefinder "peak" that produced high quality cameras like the RD, 7SII and QL17 GIII, rangefinder cameras added more conveniences, such as automatic focus, built-in flash and motor drives. But as the number of features increased, so did the size, weight and cost of the cameras. Maximum apertures and manually-operated features were cut to reduce the bulk, weight and price tag. The rangefinders of yesterday quickly evolved into the auto-everything cameras of today.

But even the newest cameras don't have anything on these three "oldie-but-goodies". Sure, they have auto-focusing and auto-film advance. There are even a few, new cameras that are as small and as light as the RD, 7SII and QL17 GIII. But most are sorely lacking in features important to many photographers. The lenses are usually slow — f4.0 or at best f2.8 — and most are not stellar performers — especially at wide apertures. The majority don't even have filter rings! The cameras also lack basic features, such as manual exposure settings. And nearly all of them are completely battery-dependent. You can spend hundreds of dollars on the latest compact 35mm or APS camera but you'll get a battery-dependent camera with a slow lens that probably isn't smaller than these fast, full-featured rangefinders. The top-of-the-line Nikon TI, for example, is 4.6" wide — larger than two of the three cameras covered here.

So how can you choose between these three amazing cameras? Don't think about it too long. Do what I did and buy them all. When you can get all three for less than the price of a new auto-everything camera, why settle? And the next time a friend asks your advice regarding a new camera purchase, tell them to buy an auto-everything camera.