by Jack and Sue Drafahl

PHOTOGRAPHIC'S USER REPORT

CAMBRON LENSES

20mm, 135mm, & 500mm

Camera lenses are a lot like people—they come in all shapes and sizes, and must perform a variety of demanding tasks. Variety definitely makes the world a lot more interesting, and photography more creative. So, why are there so many kinds of lenses in the world today? Demand for photos that look like the first of their kind is increasing. Photographers need variety in their lenses in order to achieve the creativeness that makes photography an art form. Today, camera manufacturers have dozens of lenses for each camera line, and you can add many more from other manufacturers, such as Cambron.

CAMBRON ULTRA WIDE 20mm

For most photographers, a 20mm lens is the widest necessary. This focal length makes it possible to capture all the shapes and angles of architecture, scenics, interiors, and large groups of people.

Cambron's Ultra Wide MC 20mm f/2.8 lens weighs 10 ounces and is only 2 5/16 inches long. Its ten elements are multicoated for optimum color saturation and minimal flare. Apertures range from f/2.8 to f/22 to allow working in low-light situations at wide apertures, and to maintain maximum depth of field in scenics.

The manual-focusing lens is designed to fit Canon, Contax, Konica, Minolta, Nikon, Olympus, and Pentax cameras. There's nothing wrong with manual focusing—photographers have been doing it for 166 years! In fact, most photographers who have autofocusing 20mm lenses focus manually much of the time. The 20mm Cambron focuses from six inches to infinity, with depth of field of nine inches to infinity when the aperture is set to f/22. The lens is designed to accept 58mm filters for color correction and special effects.

CAMBRON 135mm f/2.8

A popular mid-range lens, the 135mm medium telephoto is used for portrait work, photojournalism, and action subjects. Cambron's entry in this field is a compact, 14-ounce 135mm f/2.8 prime lens with six multicoated elements. It's designed to fit Canon, Contax, Konica, Minolta, Nikon, Olympus, and Pentax bodies, and, like the 20mm lens, focuses manually. Apertures range from f/2.8 to f/22, and linkage is provided for some of the older SLRs still on the market. The Cambron 135mm f/2.8 focuses down to just under five feet.

At the front of this 3¼-inch-long lens is a retractable one-inch lens hood designed to eliminate lens flare and thus increase color saturation when shooting toward a light source. The front of the lens accepts 55mm filters with the hood retracted or extended.

CAMBRON 500mm f/8 MINI MIRROR

Telephoto lenses allow photographers to capture on film subjects that are almost out of visual range. But many telephotos measure in feet, not inches, and weigh enough to wear out even the best backpacker. One solution for reducing bulk is the mirror-lens design. Mirror lenses are not nearly as fast as their telephoto counterparts, but they weigh much less, and can easily fit into a backpack. Cambron's entry into this field is so small and lightweight that it's hard to believe it is a 500mm lens. The only way to tell is to look at the front of the lens and see the telltale mirror doughnut ring. This is the smallest 500mm mirror lens on the market, only 3½ inches long and 11.6 ounces. It manually focuses down to seven feet with no extra extension. The universal T-mount adapter allows it to fit almost any camera body on the market.

FIELD TESTS

We loaded up our Nikon N8008 with ISO 400 black-and-white film and headed for our first of three shoots. A local scarecrow contest provided us with great portrait potential, offering intricate facial detail and subjects that couldn't move. We started out with the 135mm lens, and made most of our exposures at 1/500 at f/11. We found that the wide focusing ring allowed us to manually focus quickly and efficiently. (Manual focusing is just like riding a bicycle; you never forget how.) We took several close-ups, and then backed off for more-distant shots. On returning to the lab, we processed the film, and checked the negatives for sharpness and contrast, finding both to be right on the money.

Our next location was the grand opening of a new science museum. We used the 20mm, and circled around the building until we had the exterior well covered. Then, we moved inside and used the lens wide open at f/2.8 to check edge resolution.

After exposing two rolls, we moved to our final location, a local Saturday

Cambron Ultra Wide 20mm f/2.8

Cambron 135mm f/2.8 telephoto

market at the river's edge. We chose the 500mm lens, so we could keep our distance and not be detected by our subjects. The compact size and light weight of the lens allowed us to move around very inconspicuously. The lighting was bright enough to give us exposure times between 1/500 and 1/1000 at the lens's fixed f/11 aperture. Manually focusing on moving subjects was a bit more difficult than with the two shorter lenses, but we were able to get most subjects in focus.

As an afterthought, we attached our TC-16 Nikon AF tele-converter to the N8008, and reattached the 500mm mirror lens. Now we had an 800mm autofocus lens that was still small enough to fit in our hand, yet long enough to reach into the next county. Granted, the film needed for this combination must be at least ISO 400, but it still works. (The TC-16 is designed to provide autofocusing with lenses of f/5.6 or faster, but it did work with the slow mirror lens.)

After processing the film, we discovered that the negatives made with all three lenses were very sharp, and had excellent contrast. We were most surprised at the results with the tiny 500mm mirror lens. Were it not for the doughnut-shaped out-of-focus highlights and the image compression, we wouldn't have been able to distinguish the 500mm lens shots from those made with the 135mm telephoto. Edge sharpness with all three lenses was very good. All in all, this trio from Cambron performed well on our one-day shoot.

Cambridge Camera Exchange, 7th