Today we think of a "macro lens" as a lens that focuses from infinity to a distance sufficiently close to produce unity magnification on the film. The lens alone might focus to half life size; then with a short extension tube to 1:1. A macro lens is also presumed to be well corrected for close-up work. If asked who made the first such lens, I'd wager that many current photographers would say it was the Nikon Micro-Nikkor 55/3.5 of 1963. Others might suggest the 50/3.5 Micro-Nikkor of 1956 for the Nikon Rangefinder series-but that lens only focused as close as about 18 in. Old timers like myself might recall the early Exacta, Alpa, Edixa, and Contax D SLRs of the 1950s and would probably name the 40/2.8 Kilfitt Makro-Kilar. One version of this latter lens managed to focus from infinity to 1:1 without the need for an extension tube.

It will surprise many-including Zeiss rangefinder some enthusiasts-to learn that there was an earlier "macro" lens: for the Contax rangefinder camera. To my knowledge, this Zeiss lens never appeared in published lens lists. This does not mean it didn't show up in their catalogues, however. The "Contaprox I" is usually found under "Accessories for Close-up Photography" and is described a "close-up focusing device". If one reads the fine print, he or she will learn that the Contaprox I outfit includes, among other things, a "Focusing Head with built-in TESSAR f/3.5, 50 mm lens."

The "Contaprox I Focusing Head" is what we today would call a "macro lens". Without any additional accessories whatsoever, it focuses continuously from beyond infinity to about 0.6X life size. The unit can be used quite satisfactorily for general-purpose photography. Α nicely engraved focusing scale shows infinity, 10 meters, 4 m, 2 m, 1 meter, 0.7 m, 50 cm, 30 cm and 20 cm. It does not couple to the Contax rangefinder, so that scale is essential. Also marked on the scale are exposure correction factors to compensate for the extra lens extension. A slight inconvenience is that the scale is upside down when viewed from behind the camera. Clearly this lens was intended for use on a tripod or copying stand.

The only real drawback for general photography is the non-removable tripod adapter. This makes the lens a bit bulky; it is impossible to close an eveready case with this lens in place. Even though the optics are well recessed into the mount, the lens is more compact than most of today's macro lenses. The fact that the lens focuses beyond infinity lets it collapse into the camera body a bit when not in use. The long helicoid looks as though it might interfere with machinery or the image inside the camera body, but it does not. I do not know what materials were used in the helicoid: mine is absolutely dry and probably meant to be that way. It focuses almost as smoothly as any lens I own. The lack of grease ensures that dirt is not retained in the very exposed threads.

The diaphragm is adjusted by turning the front-most ring. There are no click-stops, but the ring is calibrated from f/3.5 to f/22. The iris will close to about f/32, but there is no mark for that aperture. This lens is not well suited to the use of a polarizing filter: the filter ring turns both with focusing action and aperture adjustment. And it turns very freely. Adjusting a polarizer will require a conscious effort to hold the aperture ring in place.

Nikon rangefinder users will despair to learn that this lens will not fit the Nikon. The external bayonet mount interferes with the Nikon's infinity lock release pin.

An almost complete Contaprox I outfit is illustrated in Figure 2. The set shown consists of the 50/3.5 Tessar, a ground glass focusing adapter, a magnifier for viewing the ground glass, a 30 mm extension tube you from which gets 0.6X magnification to about 1.1X real size. A 77 mm extension tube enables photography just beyond 2Xmagnification. Also available were a "4X" tube, and a case for the complete outfit. Not shown are a



FIGURE 1: Zeiss Contax IIIa fitted with a "Contameter" close-up viewfinder/rangefinder, and the "Contaprox I" 50 mm f/3.5 Tessar macro lens. It's all set for shooting at a distance of 50 cm.



FIGURE 2: Here's a representative Contaprox I outfit consisting of (from right to left) the ground glass focusing adapter, the straight ground glass magnifier, the "Focusing adapter" (macro lens), the 1X (30 mm) extension tube, and the 2X (77 mm) tube.



FIGURE 3: The more usual "Contameter" outfit consisting of the view/rangefinder and three auxiliary lenses of 20 cm, 30 cm, and 50 cm focal lengths.

right-angle magnifier, and a negative "Infinitar" auxiliary lens. The "Infinitar" fits over the main lens to permit infinity focus even when the unit is used with a device like the Zeiss "Focusing Revolver" which introduces extra extension. An optional accessory is the Contameter close-up viewfinder, more usually found in a set with three auxiliary lenses (for use with the standard 50 mm lenses) as shown in Figure 3.

Contameter The is rangefinder/viewfinder combination designed for use at three specific distances only: 50 cm, 30 cm, and 20 cm. The view through this device shows three parallax compensated, true projected frames. The outer frame is used at 50 cm, and at all three distances if the auxiliary lenses shown in Fig 3 are used. With the Contaprox I, the next smaller frame lines are used for 30 cm and 20 cm, to compensate for the smaller field of view caused by the extra lens extension. In the very center of the field is a viewing typical superposition-type rangefinder, much like the standard Contax rangefinder. The version of the Contameter shown adjusts for parallax by adjusting its tilt relative to the camera. Earlier versions used prisms matched to the three preset distances.

Although the working distance is limited to one of just three pre-set values. Ι have found the Contameter/Contaprox I combination quite easy to use. It is quite the simplest arrangement I have experienced with a rangefinder camera. Switching between close-up and general picture-taking mode is as simple as resetting the focus. And the results are every bit as satisfactory as the typical results I get with a single-lens reflex camera. Focus with the Contameter has not been not a problem. Holding the camera (and subject) still and managing depth of field are always problems in close-up photography-with any camera. Figure 4 shows one result obtained hand-holding the camera on a dull day (using ISO 100 film).

Using the Contaprox I with the ground glass focusing adapter permits focus at almost any distance. But one absolutely needs a suitable tripod or copying stand. The procedure is first to mount the lens on the tripod or



FIGURE 4: A close-up shot taken with the outfit as pictured in Figure 1 but at a working distance of 30 cm. Neither focusing nor framing presented a problem.

copying stand. Then the ground glass adapter and viewing magnifier are attached to the lens, as shown in Figure 5. The viewer adjusts for the individual human eve. This combination is used for framing and focusing, much like a reflex camera, but the image is upside down and laterally reversed. When all is framed and focused, the ground glass adapter is removed from the lens, and the camera substituted. One must be careful not to move the lens, the tripod or the subject while doing this. And not all tripod heads will permit the camera body to rotate as required (to mate the body to the lens) with the Contaprox fixed in place. A separate meter-or that built-in to the Contax III or IIIa-must be used to set exposure, making corrections as appropriate for the amount of lens extension used. The outfit is shown ready for a 1:1 photograph in Figure 6.

For magnifications larger than 1.1X, the procedure is much the same, except that the extension tube's tripod socket can be used—as shown in Figure 7.

The Contaprox I also looks (and



FIGURE 5: Here's the Contaprox I mounted on a tripod, with ground glass adapter and magnifier in place.



FIGURE 6: Here's the Contax Illa with Contaprox I and 1X tube: all set for some 1:1 shooting.



FIGURE 7: With the 2X tube in place, one has the choice of fastening either the "focusing adapter" (lens) or the extension tube to the tripod or copying stand.

functions) right at home on the Panflex reflex viewing unit, as shown in Figure 8. Of course, infinity focus is impossible. 1.2X is about the minimum magnification possible with this combination. Viewing is much more convenient, however; the image is right way up and unreversed. And viewing is possible until just before the instant of exposure. The reflex mirror in the Panflex is gigantic by SLR standards. There is absolutely no image cut-off, no matter how long the lens, how small the aperture, or how much extra extension is used. The Contaprox I is prevented from touching the mirror by a small stop inside the Panflex. Surprisingly, the lens manages to reach just past the infinity mark on its scale, although that of course does not represent infinity focus with the Panflex.

For the Zeiss Historica folks, I add one last bit of information. The "Focusing Head" pictured with this article is clearly marked "Zeiss Ikon Stuttgart." The ring surrounding the lens, however, says "Carl Zeiss Jena" and bears a serial number just over three million. (Also, the lens is T-coated.) I presume this odd combination of East and West German markings dates the unit to the early post-WW II years. I have only ever seen two of these units; both are



FIGURE 8: The Contaprox I lens unit looks right at home on the Zeiss Panflex reflex viewing unit.

marked in this way, and the numbers are within 100,000 of each other.

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(Note: Since this article was published, Charles M. Barringer and Marc James Small, in their book, Zeiss Compendium, (published by Hove Collectors Books, Hove, 1995) note that three versions of this lens exist: lens marked "Zeiss Jena", lens marked "Zeiss Opton" and lens marked "Carl Zeiss".)