amateur photographer

TEST REPORT



BY NEVILLE MAUDE

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While 35mm cameras abound in profusion, good roll-film types are very few. This is a pity, since the larger negative really does produce better quality in big prints, especially in colour, and many photographers find that transparencies are hard to sell unless at least 6 × 6cm in size. Of course, with fixed-lens cameras there is always the admirable Rollei, and its many imitators, but for many purposes the single-lens reflex, taking interchangeable lenses, has no real equal. Indeed, when people describe their ideal cameras the visualization often corresponds to a 35mm SLR scaled up to roll-film size! The Pentacon Six fits that description quite well.

Then and Now

The Praktisix II, reviewed 10 February 1965, was very similar to the present Pentacon Six. However, the latter can take 220 film (the double-length 120), and has some minor but useful modifications. In particular the general quality seems higher, the lens performance is better, the shutter and film transport proved more reliable, and the finish, especially in the chrome, is of a higher standard. Therefore, despite the close similarity of old and new models, the Pentacon Six deserves a completely fresh appraisal.

The Lenses

A wide range of lenses are available, from the 500mm Telemegor to the excellent wide-angle 50mm f/4 Flektogon (to be reviewed separately). The standard lens is a Jena 80mm f/2.8 Biometer, focussing helically down to 1 metre (closest marked distance in feet $3\frac{1}{2}$ ft). This five-element lens gave a fine performance on test, as one expects from Zeiss. Even at full aperture a 20 inch print showed excellent central sharpness and only a little obscuring flare, with good underlying detail, at the edge (flare would not appear under those minimum exposure conditions when full aperture is most needed). At f/4 the central image

PENTACON SIX

shows real biting clarity and the edge has improved considerably. Stopped down to f/5.6 there is edge-to-edge sharpness of a very high order—for example, one can read "Wellington" on a 20 inch print, which is very good indeed for a 54° lens. Apertures go down to f/22 with click stops, and there are the usual depth-of-field scales and an infra-red focussing mark. A bayonet mount is used, filter size is 58mm, and coating is violet and amber.

The Shutter

A cloth focal-plane shutter is used, with speeds from 1 to 1/1000th second plus B and also an X setting at about 1/25th. On test the speeds proved quite accurate—even the fastest which sometimes proves difficult with large formats. Synchronization is, perhaps, not perfect by modern standards since short-burning bulbs should be at 1/15th and longer-burning ones at 1/8th. Still, electronic is at about 1/25 and the bulbs can be used at slightly faster speeds than the manual suggests if a little cut-off does not matter. Delayed action is by a completely separate mechanism, giving up to about 12 seconds delay.

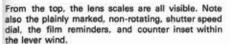
Viewing the Image

The usual method is with a folding waistlevel hood, fitted with magnifier, onto a plain screen with a lens top. Some like this, others find focussing too indeterminate and prefer a different screen. Five other screens are made for the Pentacon Six, including one with a central rangefinder spot (this is number 375 in the C.Z. catalogue), so there is plenty of choice. The entire hood is removable, and can be replaced with a magnifying viewer or a pentaprism.

Other features

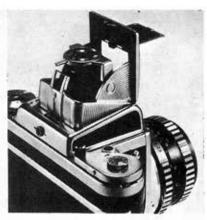
Many minor features are fitted, as one expects in a good-quality camera of this class. Film reminders, a







The back hinges open. Note how the film goes across the focal plane without being bent—an important point. The large "grips" below the camera, for easy retraction of the spool bearings, are not found on the previous Praktisix.



The hood has a magnifier, also a sports finder window, and the whole fitting can be removed and replaced by a pentaprism or magnifying viewer.

Data Sheet

Pentacon Six, with 80mm Zeiss Biometer FAD lens, focussing to 3ft, focal plane shutter 1 to 1/1000th second, synchronized with removable waistlevel folding hoof fitted with magnifier and sports finder. Lockable body release and synchro. contact.

Price, £179 18s 2d

Body only, £126 10s

E.R. Case, £7 19s 1d

Dimensions overall, with 80mm lens, 6.3 \times 5.0 \times 4.7 inches.

Weight approx., with 80mm lens, 3 lb.

Manufactured by VEB Pentacon, Dresden

Distributed by C.Z. Optical Ltd., Zeiss England House, 93/97 New Cavendish St., W.1.

Shutter Test

	Measured	Nearest			
Indicated	Millisecs	Fraction			
1/1000 sec	0.98	1/1020 sec			
1/500 sec	2.1	1/480 sec			
1/250 sec	4.2	1/240 sec			
1/125 sec	8	1/125 sec			
1/60 sec	18	1/55 sec			
1/30 sec	35.5	1/28 sec			
X sec	41	1/25 sec			
1/15 sec	70	1/14 sec			
1/8 sec	120	1/8 sec			
1/4 sec	260	1/4 sec			
1/2 sec	500	1/2 sec			
1 sec	1000	1 sec			

These tests were made by Bowens of Gerrard St. using modern electronic apparatus according to a method laid down in the relevant British Standard. The figures represent effective exposure as received by the film; they do not relate to total opening time nor any other value save effective exposure.

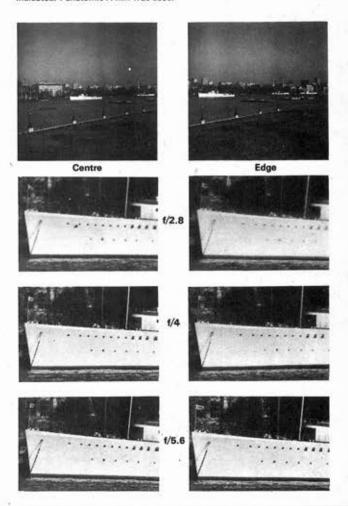
locking body release threaded for cable, a locking coaxial socket, a centrally placed tripod bush, a self resetting counter, and sports finder in the hood, are examples.

General Verdict

This camera is part of a comprehensive system of lenses and attachments, which make it suitable for professional or amateur work of the higher class. It is unique in some ways, and falls into a price range of its own for roll-film SLR cameras. Finish, performance, and dependability are better than with preceding models while the supply position with lenses and the like is vastly improved. While one can always think up minor possible improvements, such as a quick-return mirror, the basic design is admirable. For those who find the Bronica, Hasselblad, and Rollei SLR cameras too high-priced or otherwise unsuitable, then the Pentacon Six has very strong attractions. For the quality-conscious photographer this Pentacon camera is a most desirable acquisition.

Lens Performance

The first two pictures show the entire field of view, with the ship at centre and edge according to the finder. The other photos are same-size reproductions of parts of 20 inch prints made at various apertures as indicated. Panatomic X film was used.



Lens Table

togon togon	length 50mm 65mm	Aperture f/4	Elements	Diaphragm		£	8	d
- 6		f/4	7					•
togon	OF		C. C. C.	FAD	75°	101	4	6
	mmco	f/2.8	6	FAD	64°	111	13	. 2
neter	80mm	f/2.8	5	FAD	54°	_		
neter	120mm	f/2.8	5	FAD	39.5°	78	7	9
nar	180mm	f/2.8	5	FAD	26°	100	5	9
negor	300mm	f/4.5	4	Preset	16°	48	9	10
negor	500mm	f/5.6	4	Preset	10°	169	14	10
	neter nar megor negor	neter 120mm nar 180mm negor 300mm negor 500mm	neter 120mm f/2.8 nar 180mm f/2.8 negor 300mm f/4.5 negor 500mm f/5.6	neter 120mm f/2.8 5 nar 180mm f/2.8 5 negor 300mm f/4.5 4 negor 500mm f/5.6 4	neter 120mm f/2.8 5 FAD nar 180mm f/2.8 5 FAD negor 300mm f/4.5 4 Preset negor 500mm f/5.6 4 Preset	neter 120mm f/2.8 5 FAD 39.5° nar 180mm f/2.8 5 FAD 26° negor 300mm f/4.5 4 Preset 16° negor 500mm f/5.6 4 Preset 10°	neter 120mm f/2.8 5 FAD 39.5° 78 har 180mm f/2.8 5 FAD 26° 100 hegor 300mm f/4.5 4 Preset 16° 48 hegor 500mm f/5.6 4 Preset 10° 169	neter 120mm f/2.8 5 FAD 39.5° 78 7 har 180mm f/2.8 5 FAD 26° 100 5 megor 300mm f/4.5 4 Preset 16° 48 9