



Philip's astrophotography: an introduction to film and digital imaging

by H. J. P. Arnold

George Philip & Co., 2003. ISBN 0-540-08312-7. Pp 256, £9.99 (pbk).

Although described as an 'introduction' to astronomical imaging, this book is much more. 'Douglas' Arnold makes excellent use of his experience as a professional photographer with Kodak and of his close involvement with the Apollo Moon landing programme to produce very high quality images of a vast range of topics. Each chapter starts with an excellent introduction and progresses to give detailed information regarding appropriate lenses, focal lengths, apertures, exposure times, film types and speed for the chosen task. The text is beautifully illustrated with examples of the author's own work, or in some cases, that of acknowledged experts.

Drawing on a lifetime's experience, the author describes in fascinating detail tried and tested ways to high quality results, including many tricks of the trade. The book is a successful blend of sufficient astronomical background and theory with practical and detailed advice, culminating in stunning images that are both scientifically useful and artistically pleasing.

The comprehensive coverage of subjects includes the sky above, photographic theory, equipment, procedures, the Moon and Sun and their eclipses, tracking techniques, and the planets. In the chapter entitled 'The Earth is a planet too' the author shows such diverse examples as aurorae, noctilucent clouds, rainbows, halos, twilight effects and lightning. A rare image of

the zodiacal light features in the chapter on comets, both of which require special treatment for low intensity images. Meteor and satellite imaging is also covered and many stimulating ideas are explored in the section on 'project photography'.

More advanced techniques include the use of equatorially driven camera platforms and 'piggy back', prime focus and eyepiece projection telescopic imaging. The latest developments using CCDs, both in dedicated hardware and much larger versions in colour digital cameras make interesting reading, as do image manipulation techniques to produce stunning montages.

Douglas Arnold is clearly a Nikon fan and has used equipment only dreamed about by most photographers. Simpler, less expensive systems can be used with some loss of quality, but the advice and guidance given at all stages is invaluable for all photographers. I found this book to be accurate, stimulating and packed with useful references. It will appeal to a wide readership. Everything about the book says 'quality', and it does justice to a lifetime of photographic experience expertly illustrated.

R. J. Neville

Robert Neville worked originally as a photographic scientist in the Kodak research laboratories, and is now Director of the BAA Instruments and Imaging Section.

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