

Other titles in this series

Telescopes and Techniques (2nd Edn.)
Chris Kitchin

The Art and Science of CCD Astronomy David Ratledge (Ed.)

The Observer's Year Patrick Moore

Seeing Stars Chris Kitchin and Robert W. Forrest

Photo-guide to the Constellations Chris Kitchin

The Sun in Eclipse
Michael Maunder and Patrick Moore

Software and Data for Practical Astronomers David Ratledge

Amateur Telescope Making Stephen F. Tonkin (Ed.)

Observing Meteors, Comets, Supernovae and other Transient Phenomena

Neil Bone

Astronomical Equipment for Amateurs Martin Mobberley

Transit: When Planets Cross the Sun Michael Maunder and Patrick Moore

Practical Astrophotography

Jeffrey R. Charles

Observing the Moon Peter T. Wlasuk

Deep-Sky Observing Steven R. Coe

AstroFAQs Stephen Tonkin

The Deep-Sky Observer's Year Grant Privett and Paul Parsons

Field Guide to the Deep Sky Objects Mike Inglis

Choosing and Using a Schmidt-Cassegrain Telescope

Telescope Rod Mollise Astronomy with Small Telescopes Stephen F. Tonkin (Ed.)

Solar Observing Techniques Chris Kitchin

Observing the Planets Peter T. Wlasuk

Light Pollution Bob Mizon

Using the Meade ETX Mike Weasner

Practical Amateur Spectroscopy Stephen F. Tonkin (Ed.)

More Small Astronomical Observatories Patrick Moore (Ed.)

Observer's Guide to Stellar Evolution Mike Inglis

How to Observe the Sun Safely Lee Macdonald

The Practical Astronomer's Deep-Sky

Companion Jess K. Gilmour

Observing Comets Nick James and Gerald North

Observing Variable Stars

Gerry A. Good

Visual Astronomy in the Suburbs

Antony Cooke

Astronomy of the Milky Way: The Observer's Guide to the Northern and Southern Milky Way (2 volumes)

Mike Inglis

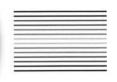
The NexStar User's Guide Michael W. Swanson

Observing Binary and Double Stars Bob Argyle (Ed.)

Navigating the Night Sky Guilherme de Almeida

The New Amateur Astronomer Martin Mobberley Care of

Astronomical
Telescopes and
Accessories



A Manual for the Astronomical Observer and Amateur Telescope Maker

M. Barlow Pepin

With 82 Figures



All illustrations in this book are by the author, unless otherwise noted.

British Library Cataloguing in Publication Data Pepin, M. Barlow

Care of astronomical telescopes and accessories: a manual for the astronomical observer and amateur telescope maker. (Patrick Moore's practical astronomy series) 1. Telescopes–Maintenance and repair

I. Title 522.2'0288 ISBN 185233715X

Library of Congress Cataloging-in-Publication Data Pepin, M. Barlow.

Care of astronomical telescopes and accessories: a manual for the astronomical observer and amateur telescope maker / M. Barlow Pepin.

p. cm. — (Patrick Moore's practical astronomy series, ISSN 1617-7185)

Includes bibliographical references and index.

ISBN 1-85233-715-X (pbk. : alk. paper)

1. Telescopes-Amateur's manuals. I. Title. II. Series.

QB88.P46 2004

522.2-dc22

2004049148

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the publishers, or in the case of reprographic reproduction in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers.

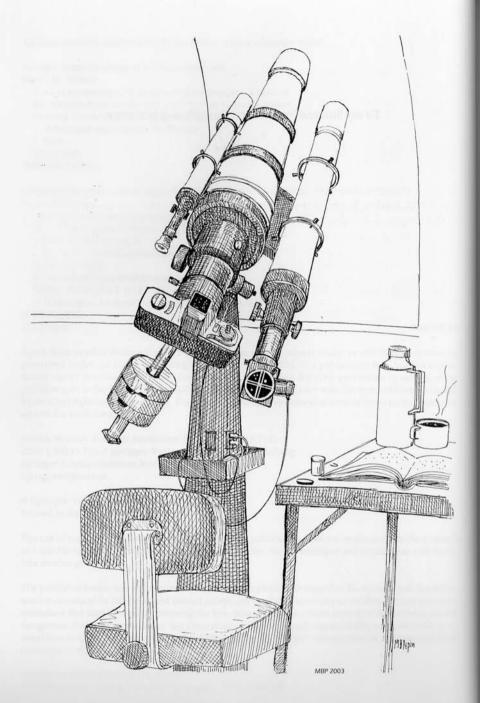
Patrick Moore's Practical Astronomy Series ISSN 1617-7185 ISBN 1-85233-715-X Springer-Verlag London Berlin Heidelberg Springer Science+Business Media springeronline.com

© Springer-Verlag London Limited 2005 Printed in the United States of America

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant laws and regulations and therefore free for general use.

The publisher makes no representation, express or implied, with regard to the accuracy of the information contained in this book and cannot accept any legal responsibility or liability for any errors or omissions that may be made. Observing the Sun, along with a few other aspects of astronomy, can be dangerous. Neither the publisher nor the author accepts any legal responsibility or liability for personal loss or injury caused, or alleged to have been caused, by any information or recommendation contained in this book.

Typeset by EXPO Holdings, Malaysia 58/3830-543210 Printed on acid-free paper SPIN 10901120 To my Sun and Stars: Mary, Danielle and Jeannette



Foreword

Many new books about astronomical telescopes are published each year, but this one, by M. Barlow Pepin, is unlike any other – at least as far as I know.

The emphasis has shifted lately. Amateur telescope making is less popular than it used to be because professionally made telescopes are much cheaper than they were only a year or two ago. But there is no point in having a good telescope unless it is well cared for, and many observers pay too little attention to this. It is not only a question of common sense; expert guidance is also needed, and in this book M. Barlow Pepin gives it. He goes into detail with regard to all aspects of telescope care and maintenance, and even experienced observers will learn a great deal from it.

Astronomy is one of the very few sciences in which amateurs can make valuable contributions, but good, well-maintained equipment is essential. If you want to get the best out of your telescopes and other astronomical instruments, then this is the book for you.

Sir Patrick Moore CBE, FRS