(M31) to 12.2 (NGC 891). As astro-photographs their aesthetic quality is distinctively variable, but they are admirable for their intended purpose; the stellar images are clear and sharp upon and around the nebulous image. The booklet is of a handy pocket-size, and being spiral bound, the cards lie firmly flat when opened; it can conveniently be held in the hand at the telescope, and should be durable under hard observatory use.

One could point at a few negative features: while the north direction is indicated on each photo, the other coordinate E-W (or I-P) is omitted; so also is that other imperative, an indication of plate scale. This will not bother the experienced observer, but the author/photographer’s choice of fainter emission rendition stars much fainter than their visual brightness, and this will have to be guarded against during observation. The other limitation—that there are only 40 cards—will soon be rectified by the publication of a second volume of some 40 or more additional objects.

Juhani Salmi is to be congratulated both for his skill and for his enterprise: for any deep-sky observer, *Check a Possible Supernova* is a worthwhile addition to his observational kit; for the hopeful supernova-hunter it is indispensable.

**Kenneth Glyn Jones**

---

**THE ADJUSTMENT AND TESTING OF TELESCOPE OBJECTIVES**


There are few pieces of scientific equipment that can claim to be of nineteenth century design and are yet in constant use today. Fewer still form the subject of a book that has run through four editions and has just been reissued, virtually unaltered, in a fifth.

This book is a classic on which many users of large-aperture refractors (including the reviewer) cut their optical teeth. H. Dennis Taylor (1862–1943) was a first-class practical optician who made many innovations in the design, computing, manufacture and maintenance of big objectives. Examples of his Cooke photographic triplet are still in nightly use in many observatories, and I am willing to bet that an earlier edition of this book can always be found in or near their domes. Not that Taylor’s advice on cleaning, adjusting and maintaining lenses is directed wholly at users of such large objectives: all those professionals or amateurs who use refractors of more than a few inches’ aperture will benefit from his words. It is not for nothing that his Plate I, illustrating the in-focus and near-focus images produced by lenses with various optical imperfections, and by perfect lenses with various mal-adjustments, has become famous. It is reproduced here again for the enlightenment of a new generation of observers.

The progress of optical and engineering science has ensured that Taylor’s methods used for computing, manufacturing and mounting sizeable objectives are no longer in use. But the objectives made by him and under his direction survive, whereas the technicians familiar with their maintenance have, for the most part, passed on. Their successors are equipped for quite other things than advising on how to go about diagnosing maladjustments that may easily be cured. We are within sight of a state of affairs in which first-class objectives may be in use by astronomers who do not have the experience needed to distinguish between errors of adjustment and shortcomings of design. With the reissue of this book all refractor owners will be able to satisfy themselves that they are getting the best out of their equipment. Little can be done if it turns out that imperfections in the final image are due to faulty design or manufacture, but if you are not wholly confident that this is indeed the case, buy this book, apply its advice (maybe suitably modified to fit your particular case) and make quite sure you cannot, by small readjustments of the components, improve your refractor’s performance. Dennis Taylor will rejoice, in the corner of Valhalla reserved for his kind, if his reissued instructions rescue even one good objective from blame that properly belongs to maladjustment.

**A. Hunter**

---

**EDDINGTON: The most distinguished astrophysicist of his time**


This book is the substance of two invited lectures given by Professor Chandrasekhar in Cambridge at Trinity to mark the centenary in 1982 of the birth of Sir Arthur Eddington. Eddington was one of Trinity's more distinguished Fellows among a galaxy of great names—others contemporary with him were, for instance, J. J. Thomson and Rutherford—though the author of this little book does not himself stand outside the scene, as some delightful reminiscences of his own time at Cambridge with Eddington make clear. But this is not just a series of memories, it is also a review of Eddington the astrophysicist and astronomer. There is some mathematics, though not enough to put off even the non-mathematical reader, for the text can readily be understood in a general way without it. But, of course, it has even more meaning if you have at least some grasp of the meaning of the mathematical expressions.

What this book gives, then, is primarily a not uncritical assessment by a distinguished younger contemporary of the astronomical work of one of the great figures in twentieth century astronomy. Not for the absolute beginner, certainly, but very well worth reading by those who are not unfamiliar with their basic astronomy.

**Colin A. Ronan**

---

**THE NIGHT SKY**


This program attempts to take the plansisphere into the computer age. "Nightsky", and not "NS" as mentioned in the instructions, loads, together with data for 1078 stars down to magnitude 4.9, in a total of about three and a half minutes from tape.

A friendly menu system is used to allow the selection of various options such as the time, day or constellation. The program emulates a planetarium by allowing the user to view the sky from anywhere on the Earth's surface between latitudes of 66° north and south. I liked the city