VARIABLE STARS

W. Strohmeier, Pergamon Press, New York, 1972. 279 pages. \$19.50.

Considering the breadth of the subject and its relatively long history, the number of currently available general books on variable stars is remarkably small. Two "bibles" published in the U.S.A. are now out of print (but far from out of date), namely C. Furness, Introduction to the Study of Variable Stars (Houghton, Mifflin, 1915), and Campbell and Jacchia, The Story of Variable Stars (Blakiston, 1941). Several others are difficult or impossible to obtain, such as C.P. and S. Gaposhkin, Variable Stars (Harvard, 1938)* or P.W. Merrill, The Nature of Variable Stars (Macmillan, 1938). In recent years, this gap has been filled somewhat by the prolific pen of our British colleague John Glasby, with his Variable Stars (Harvard, 1969), and by C. Hoffmeister's Die Veränderliche Sterne (Hamburg, 1970) in German, and finally by Dr. Strohmeier's present book of the above title.

Of the last three, Glasby's work is inadequately referenced and loses its general appeal by confining details on many topics to the author's own work or that of other British observers; Hoffmeister's book is excellent but overly technical for many readers, with the usual language barrier for Americans; leaving us with Strohmeier which apparently offers the best up-dated text available in this country.

Dr. Strohmeier is the Director of the Remeis Observatory of Bamberg University in Erlangen-Nuremberg, West Germany. The English text of his book has been edited by A.J. Meadows of the University of Leicester (England). The treatment of the subject is thoroughgoing and designed primarily for the reader who has an interest in astrophysics and has some scientific training. However, the text is in general not too technical for any reader who has at least been exposed to elementary calculus.

Following an introductory chapter which includes some historical material, the author, in chapter 1, plunges immediately into high-energy astrophysics as applied to energy generation in variable stars. This direct approach is typical of all chapters in the book. The average reader should not be discouraged, however, with chapter 1. There is plenty of readable material in this and in the later chapters --- but it must be carefully "dug out". Strohmeier's book cannot be read like Glasby's, as a general running account of the subject. This is a monograph, a scholarly exposition concentrating on observational material, spectroscopic as well as photometric, as applied to existing theories concerning physical processes taking place in variable stars. As such, the book is never "easy going", but is very rewarding to those who have the patience to absorb it.

Great economy of words is evident in the text, yet this is never accomplished at the expense of clarity --- an admirable characteristic. Most admirable is the complete system of referencing for all technical statements, the generous indexing, and the inclusion of a chronological appendix listing important books and monographs on variable stars published since 1940.

^{*} Copies available from AAVSO Headquarters, \$4.00 postpaid.

It is easy to criticize this book on the basis of its lack of appeal to the non-technical reader; however, such appeal was hardly the author's intent. One is sure to find no practical suggestions here about how to observe variable stars. Nevertheless the book will undoubtedly become a classic in the literature on the subject. It should be in every variable star observer's library whether he is professional, amateur, technical, non-technical, or otherwise.

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ANNOUNCEMENT: Revised Sequence for SS Cygni.

A number of observers have noted apparent discrepancies in the sequence for 213843 SS Cygni. Wayne Lowder discovered in the literature a photoelectrically measured sequence for the star (Lenouvel & Daguillon 1956, Journal des Obs. 39, 9). This sequence differs in some respects from that shown on the AAVSO charts. Three Stamford Observatory plates were measured on the Yale University Observatory's microdensitometer by Charles Scovil, confirming the work of Lenouvel and adding three new comparison stars convenient to the variable. The new sequence reproduced below combines this work, and also confirms the changes suggested by the AAVSO visual observers.

The new sequence should be put into use by observers on April 1, 1974 (and not before, for uniformity). Copies of revised charts including a new "e" by Clinton Ford may be obtained from AAVSO Headquarters.

The chart is reproduced to 'd' scale (20"=1mm). Underlined magnitudes are photoelectric (visual), all others are photovisual. South is up.

