

1973JAVSO...2

COMMITTEE REPORTS

SOLAR DIVISION, Chairman: Casper H. Hossfield  
540 North Central Avenue  
Ramsey, New Jersey 07446

A major concern of the Solar Division during the last six months has been the finding of a replacement for Keith Strait, who has served as editor of the Solar Bulletin since 1970, and who has also analyzed the indirect flare patrol charts and prepared the monthly ionospheric disturbance reports for submission to NOAA.

Effective with the June, 1973 issue, Carolyn Hurless will serve as editor of the Solar Bulletin. Mrs. Hurless will depend on others to supply material for the Bulletin, but she will do the mechanical work of preparation and distribution.

It has not been possible to find anyone to analyze the charts and prepare the NOAA report. It will therefore be done by the Solar Division Chairman, who did it in the past. Hopefully someone will soon be found to do this difficult job for the AAVSO.

---

CHART DISTRIBUTION, AAVSO Headquarters

During the first six months of the fiscal year the orders for charts filled totalled as follows:

8 x 10 charts	7,234
Finder charts	900
Atlases	7

---

NOVA SEARCH, Chairman: Carmine V. Borzelli  
12 Corbin Avenue  
Jersey City, New Jersey 07306

The Nova Search Committee continues to send out material to people inquiring about the program. So far, 28 areas are under observation. There will be no general change in the material now being distributed until October. At the present writing, all mail has been answered and material sent out. Anyone who has written in the past and not received an answer should write again. There are many search areas that need observers.

A new section on supernova search will survey galaxies of 10th magnitude or brighter. It is not certain whether these galaxies are the same as those covered by the Webb Society in England, as no word has been received from them.

---

ECLIPSING BINARY, Chairman: Marvin E. Baldwin  
6590 Support Sq. (AFSC)  
Andrews AFB, Md. 20331

During the last several months all eclipsing binary data prior to January 1973 has been plotted and each eclipse has been measured by the tracing-paper method and reduced to a heliocentric time of minimum with the exception of a few which

have special problems.

Continuing work on the reduction of data has made it possible to compile and submit the first of a long series of minima for publication in the Information Bulletin for Variable Stars. This first publication of minima since 1967 will include a major portion of data collected in the 1967-1969 time period.

The reductions are now sufficiently complete to justify making an analysis of many stars for changes of period and deviations from the elements given in the 1969 General Catalog of Variable Stars, and from the ephemerides published in support of the eclipsing binary program. Donald Livingston has already received revised periods and initial epochs to be used to update our ephemerides for some 25 program stars. This revision will be effective with the July-August 1973 ephemerides.

Everyone who has participated in the observation of these stars since the program's inception some eight years ago should understand that it is only through their efforts that these analyses have been possible. The continuing support of our veteran observers and the efforts of those new observers who join us along the way are equally appreciated.

We especially want to recognize the support of those who have provided some essential ingredients: Len Kalish, chart distribution; Don Livingston, production of ephemerides; Don Ortwein, assistance in reduction of data; Bruce Small, Jack-of-all-trades in providing heliocentric correction tables, special ephemerides, chart updating, and special computer analyses; Kurt Locher and the Swiss observing group (BBSAG), whose minima fill many gaps in the analyses currently in progress; and the AAVSO office staff for prompt reproduction and distribution of bulletins and ephemerides and generally outstanding support of the program.

---

RR LYRAE, Chairman: Marvin E. Baldwin.

The objectives of the RR Lyrae Committee are reaching a degree of maturity not previously possible because we now have a sufficient data base to define some of the more detailed behavior patterns of several program stars.

Until recently, observing objectives were mostly confined to measuring times of maxima as accurately as possible, and to obtaining sufficient data to establish mean light curves. Careful examination of data for some stars is now, however, revealing other characteristic peculiarities which are even more interesting and which will greatly influence revision of observing schedules for the purpose of answering new questions that arise. Our recent detailed study of XZ Cygni data aptly illustrates this.

Although pursuit of the RR Lyrae stars seems ever more important, a word of caution for observers is in order. Not all observers are able to estimate a star's brightness with the fine degree of accuracy that is required to extract the detailed information desired. Extensive evidence of this was available among the data on hand for XZ Cygni. The problem is often so serious that we are not able to make a meaningful reduction of the available data until we have sufficient clues to determine which are our best and which are our poorest observers.

Once again, I advise those who would observe RR Lyrae stars to begin first with the long period stars and/or the eclipsing binaries until observing skill is fully developed and elimination of observing bias can be fully demonstrated. Observations which are not accomplished with absolutely the greatest possible care and skill can often wreck an entire observing program.

Those observers who have fully developed their observing skills, identified and insofar as possible eliminated their observing biases, and who are able to attack a difficult observing problem with confidence and persistence, are encouraged to undertake an RR Lyrae project. The degree of satisfaction derived from the successful pursuit of such an undertaking offsets the difficulties and frustrations encountered many times over.

---

PHOTOELECTRIC PHOTOMETRY, Chairman: Arthur J. Stokes  
Stokes Lane (Box 398)  
Hudson, Ohio 44236

Howard Landis and Larry Lovell are continuing their work on  $\beta$  Lyrae, and have also done some work on the determination of new comparison star sequences for various new charts.

The Manual on Photoelectric Photometry is under complete revision to bring it up to date and include the latest in solid-state circuitry.

In the past the Committee has presented mainly help on equipment building and maintenance problems. The emphasis is being shifted to include observing programs for newcomers to work on.

---

CONDENSED TREASURER'S REPORT - Oct. 1, 1972 to Mar. 31, 1973

GENERAL FUND

Receipts:

Dues	\$ 5,418.00
Application Fees	60.00
Subscriptions	616.00
Grants: NOAA	852.00
Gifts	5,212.55
Chart Fund	943.77
Chart Catalog Sales	32.10
Manual Sales	36.00
Transfers from Endowment Fund Income	10,343.47

Expenditures:

Salaries and Payroll Taxes	\$ 13,000.02
Office Expenses	7,994.54
Solar Division	427.26
Printing Report #29	1,013.34
AAVSO Journal Expense	512.21
AAVSO Circular	132.59
Eclipsing Binary and RR Lyrae Programs	60.28
Miscellaneous	373.65
	<u>\$23,513.89</u>
	<u>\$23,513.89</u>