

COMMITTEE REPORTS

CHART DISTRIBUTION, AAVSO Headquarters

The following is a report of AAVSO charts distributed from headquarters from 10/1/77 through 9/30/78. A total of 355 orders were filled including 133 sets for new members.

8 x 10 charts	17,287
Finder charts	354
Atlases	33

NEW CHART COMPILATION, Chairman: Clinton B. Ford
10 Canterbury Lane
Wilton, CT 06897

Since June 1, 1978, the following mailings of AAVSO Preliminary Chart copies have been made from the Secretary's office. All mailings have resulted from requests by observers:

<u>Destination</u>	<u>No. of Different Addresses</u>	<u>Chart Copies Mailed</u>
U.S.A.	9	1,186
Canada	3	69
Australia	1	5
Japan	2	64
West Germany	<u>1</u>	<u>30</u>
	<u>16</u>	<u>1,354</u>

A more detailed breakdown of these figures is available, if desired. A total of 2 complete sets of the Preliminary Charts was shipped in the past six months. A complete set now consists of 576 charts. The figures above are smaller than for the previous six months, due in some part to long-delayed repairs to the Secretary's copying machine.

A total of 42 copies of the new June, 1978, Catalog of Preliminary Charts was distributed at the June, 1978, meeting to members present. An additional 16 copies were mailed later from the Secretary's office, in response to requests.

The backlog number of variable stars awaiting preliminary charting now stands at approximately 80. Again, revisions of many previously issued charts occupy about fifty percent of the time available for work on preliminary charts.

PHOTOELECTRIC PHOTOMETRY, Chairman: Howard Landis
Price Road West
RFD 2, Box 44ED
Locust Grove, GA 30248

Looking over past reports, I note that in 1976 there were three active photoelectric observers. There are now six active with at least six more that have photoelectric equipment but are not active. The members who are contributing are Leonard Kalish, Howard Landis, Howard Louth, Larry Lovell, Tom Renner and David Skillman.

Most of our observing is concentrated on attempting to discover more of the RS CVn-type stars. This is under the direction of Dr. D. S. Hall of the A. J. Dyer Observatory, Vanderbilt University. He is publishing our data in several of the professional astronomical journals.

Since the Spring, 1978, meeting, I have answered eight requests for information concerning photoelectric photometry. They require discussion of the many aspects of the necessary equipment, both

electronic and optical. Some ask about what can be accomplished and what is the significance of PEP data collected by amateurs. Two PEP Bulletins were issued and sent to 14 AAVSO members.

Other photoelectric observations consist of three minima of SW Lac by Leonard Kalish and an unknown number of points on the latest Nova in Cygnus by David Skillman.

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

The Chairman received 3693 Nova Search observations from 17 observers covering 112 areas. Eight observers submitted reports every month. No novae were discovered under the program for the year. On September 10th, Nova Cygni 1978 was discovered by two AAVSOers, Warren Morrison in Canada and Peter Collins in Arizona. The Chairman extends his congratulations to these gentlemen, who had the good fortune of being in the right place at the right time. Several Nova Search observers indicated that they had been searching in area 27, the location of the nova, only the night before. The discovery of a nova requires a certain amount of good luck, or being in the right place at the right time. As you can see from the totals of the annual report herein, there are too few observers in the program. Because of this, novae go undiscovered every year. Full program details are available for immediate use from the NS chairman.

The Chairman also received 218 Super nova search observations from 3 observers covering 21 different galaxies. Program details are also available from the NS Chairman. If you have requested information in the past but have received no answer, please write again. Your request may not have reached the Chairman.

Nova Search Observations

<u>Observer</u>	<u>Affiliation</u>	<u>Location</u>	<u># Areas</u>	<u># Observations</u>
C. Borzelli	AAVSO	New Jersey	86	2123
D. Costanzo	AAVSO	Virginia	3	181
M. Durkefalden	AAVSO	W. Germany	101	259
F. Farr	Ast.Soc.Vic.	Australia	1	14
D. Fraser	A.S.V.	Australia	3	48
P. Garnavich	AAVSO	Maryland	2	8
L. Hiett	AAVSO	Virginia	3	25
D. Levy	AAVSO	Canada	5	149
H. Luft	AAVSO	New York	1	71
P. Martin	BAA/NSW	Australia	2	12
T. Sarna	AAVSO	Illinois	4	15
F. Schmidt	AAA/NYC	New York	5	64
J. Scholl	AAVSO	New York	16	161
F. Traynor	BAA/NSW	Australia	Dome Searches only	
J. Trainor	A.S.V.	Australia	2	14
T. Wilson	AAVSO	W. Virginia	6	407
M. Zalcik	AAVSO	Canada	2	42
				3593

Super Nova Search Observations

			<u># Galaxies</u>	
C. Borzelli	AAVSO	New Jersey	12	186
W. Gartlemann	AAVSO	Georgia	9	23
R. Godden	BAA	England	6	9
				218

ECLIPSING BINARY, Chairman: Marvin E. Baldwin
Route 1
Butlerville, IN 47223

During the 1977-78 observing year seventeen observers made nearly 8000 observations in the process of obtaining data for approximately 650 minima. This is a decrease of about 25 percent relative to last year's torrid observing pace, but still represents a sizeable portion of the world's production of eclipsing binary minima timings. Our group of observers associated with the Milwaukee Astronomical Society continue to set the pace lead by Gerry Samolyk who produced nearly a third of the eclipsing binary observations. Reports of photoelectric observations were submitted by Leonard Kalish.

Gary Wedemayer continues to handle distribution of preliminary charts for eclipsing binary stars. Key punching of these data, as well as the RR Lyrae data, continues to be accomplished by MaryJane Taylor. Further progress has been made toward establishment of computer reduction of the major portion of the times of minima. Peter Taylor reports that his computer program is working well and that the next list of minima to be prepared for publication will be run on the computer in time for comparison with results of manual reductions to determine if any further refinements of the program will be needed. Donald Livingston continues to provide computer generated ephemerides for the program stars.

We have initiated a "Southern Project" to encourage participation by qualified observers in the Southern Hemisphere. Most of the eclipsing binaries in the Southern Hemisphere have been neglected for many years. As a result, many opportunities exist for the careful visual observer to obtain data which can be used to update or verify the ephemerides currently being used. Unfortunately, materials to assist the observer are in short supply. However, Jan Hers of Sedgfield, South Africa has prepared a few charts of some southern eclipsing binary stars including visual comparison star sequences. Serious observers who wish to make a project of one of these stars should contact the writer or the AAVSO for further details.

RR LYRAE, Chairman: Marvin E. Baldwin
Route 1
Butlerville, IN 47223

During the past year four observers, Horace Smith, Ernie Underhay, Bruce Wingate and the writer, obtained about 2100 observations of 25 RR Lyrae stars. About 140 times of maxima will be extracted from these data. Peter Taylor's computer program has proven to be highly effective in measuring the times of maxima from the observational data. The computer program has the further capability of revising the ephemeris prediction elements. Some computer analyses already completed include BH Aur, SZ Hya and DH Hya. Others are pending awaiting examination of old data on the computer tapes to assure compatibility with the current format and some are awaiting keypunch of the most recent data.

CLASSICAL CEPHEIDS, Chairman: Thomas A. Cragg
Anglo-Australian Observatory
P.O. Box 377
Coonabarabran, NSW 2857, Australia

Abstract

The Chairman is preparing a report covering the third 1000-day interval for selected classical cepheids whose periods are greater than 10 days. It will contain the results of some 4,650 estimates on 34 stars made by 21 observers. The program's prime purpose is to look for period changes reflected by differing O-C's (observed maximum date minus calculated maximum date) which could be associated with evolution in these stars.

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