

COMMITTEE REPORTS

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

During the six month period, the chairman received 1072 observations from 14 observers covering 178 of the 230 areas in the Nova Search Program. While no novae were discovered by the program, two were discovered photographically: one in Area 107 (October), and one in Area 34 (November). Neither nova was brighter than 8th magnitude, which is lower than the limit normally used (7.75) in the visual program. Both areas are under consideration by the chairman for designation as common observing areas.

The chairman has received many requests for information and is presently up to date with his correspondence. However, due to past performance of the U.S. mails, he requests anyone not receiving a reply to write again.

Material for the Nova Search Program is available from the chairman and AAVSO Headquarters. The chairman has several charts available to prospective observers of the Supernova program and will furnish them and program material upon request.

ECLIPSING BINARY, Chairman: Marvin E. Baldwin
R.R. #1
Butlerville, Ind. 47223

The eclipsing binary program has recently experienced a major increase of activity. During the six months beginning October, 1974, 27 observers reported observations for 454 timings of minima. A record number of observers (13) reported in double figures. Two observers, Leonard Kalish and Doug Sharpe, reported PEP observations. Kalish's PEP data were reported in conjunction with a special project to verify changes in the shape of the light curve of SW Lac.

Special notes of appreciation are due to Ed Halbach who has spawned a major eclipsing binary observing center within the Milwaukee Astronomical Society with two new observers, Gerry Samolyk and Gary Wedemayer, each contributing more than 40 minima; and to Karl Simmons, Rusty Harvin and Richard Sweetsir who retain for Jacksonville, Florida, the honor of being the most active area for observation of EB stars.

Mingled with our successes is one shortcoming which continues to plague the eclipsing binary program. We continue to issue to our observers nonstandard charts and sketches, often of questionable accuracy. Your committee chairman has to take the responsibility for the slow progress in the chart improvement project primarily because of his failure to take full advantage of all resources made available to him by the chart committee and other individuals. There is an atmosphere of pressing urgency to put this project near the top of our priority lists.

RR LYRAE, Chairman: Marvin E. Baldwin

Activity within the RR Lyrae Committee continues to be steady but limited. Five observers reported data during the past six months. About 60 measurable times of maxima will be extracted from the reported data.

Several stars on our program show evidence of recent period changes. Most notable among these are TT Cnc whose maxima are about one hour later than published in our ephemeris, RR Gem (about 1 1/2 hours early), and UY Boo whose maxima are very early. This star has defied our efforts to observe the rising leg of its light curve.

Observers are reminded that long observing runs are required for these stars, with observations closely spaced. MaryJane Taylor has demonstrated outstanding success in obtaining valuable data for the study of XZ Cygni through the application of this technique.

TELESCOPE LOANS, Chairman: Charles E. Scovil
Stamford Observatory,
Stamford Museum
Stamford, Conn. 06903

In April, 1975, the AAVSO acquired a 3-inch Alvan Clark & Sons refractor and a 9.6-inch homemade reflector from the estate of our member Richard W. Hamilton. The refractor has an alt-azimuth mounting which is not of Clark manufacture and is just sufficient to support the telescope. The reflector consists of tube and optics only, the mirror being in need of aluminizing. The tube is of sheet metal and is quite sturdy. The figure of the mirror is as yet untested. It is not expected that either telescope will be loaned out. Both are offered for sale to members, who are invited to contact the committee chairman regarding purchase.

A 2.25-inch transit telescope has been loaned to our member Robert Ariail with the expectation that he will purchase it.

One telescope is available for loan, an 8-inch Springfield-mounted reflector donated by Cyrus Fernald. It is presently located at South China, Maine. The telescope is permanently mounted on a large pier, and therefore is not easily demounted for shipping.

All other telescopes remain with the previous borrowers.

List of AAVSO telescopes and locations:

6" "Charles A. Post" refractor	on hand (not for loan)
6" Clark refr.	Missouri Western State Col.
4" refr.	Thomas Williams, N.J.
4" refr. (badly scratched lens)	James Currie, Ohio
4" refr. (broken lens)	Karl Baltz, Texas
6" refr.	Leslie Peltier, Ohio
8" Dynamax	M. & J. Mattei, Mass.
3" Clark (Hamilton)	on hand
9.6" reflector (Hamilton)	on hand
8" reflector	Chandler Holton, Maine
4" refr.	J. Pickering, Pa.
3.5" refr.	Mrs. Karl Wells, N.Y.

The last two are in the hands of descendents of the original borrowers, and may not be recoverable. Letters have been written to both. No answers have been received as of this writing.

CHART DISTRIBUTION, AAVSO Headquarters

During the first six months of the fiscal year a total of 217 orders was filled, including 42 sets for new members, as follows:

8 x 10 charts	5,231
Finder charts	181
Atlases	11

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

Since September, 1974, the following mailings of AAVSO preliminary chart copies have been made from the chairman's office. Most mailings have been the result of direct requests from correspondents:

<u>Destination</u>	<u>No. of Addressees</u>	<u>Chart Copies</u>
U.S.A.	22	2,941
Canada	6	3,609
Other Countries	<u>12</u>	<u>1,269</u>
Totals	40	<u>7,819</u>

The following is a list of members now actively engaged in new or revised chart production:

Charles E. Scovil	(Conn.)	Photography, plate measuring, drafting.
Wayne M. Lowder	(N.Y.)	Literature research, preliminary sketching.
Clinton B. Ford	(Conn.)	Drafting, revisions, copying, distribution.
Rev. Ronald Royer	(Calif.)	Photography
Thomas A. Cragg	(Calif.)	Literature research, drafting.
John E. Bortle	(N.Y.)	Drafting, Distribution.
Michael Mattei	(Mass.)	Drafting, final revisions.
George W. Kelley	(Va.)	Drafting
Robert E. Bass	(Texas)	Drafting

Comparison star sequence information and other new chart data have been obtained from, or exchanged with, the following foreign variable star workers during the past six months.

J. E. Isles	(England)	VSS, BAA
M. V. Duruy	(France)	AFOEV
E. Schweitzer	(France)	AFOEV
M. D. Overbeek	(So. Africa)	VSS, ASSA
S. D. O'Connor	(Canada)	AAVSO
I. D. Howarth	(England)	VSS, BAA
G. Comello	(Netherlands)	Kapteyn Lab., Groningen Univ.
H. Feijth	(Netherlands)	ditto

Twenty-nine new variables have been covered by issues of new or revised preliminary charts since publication of the June 1974 Catalog of Preliminary Charts. The backlog of material available for immediate drafting of previously uncharted fields continues to be substantial.

SOLAR DIVISION, Chairman: Casper H. Hossfield
P. O. Box 367
Mahwah, New Jersey 07430

Robert Ammons, who has been appointed as the SID Coordinator, is carrying on the SID analysis and the STD program satisfactorily. The sunspot data is being reduced by the chairman and the Solar Bulletin is edited by Carolyn Hurless. Efforts are being made to catch up with the correspondence, particularly with the new observers.

PHOTOELECTRIC PHOTOMETRY, Chairman: Arthur J. Stokes*

Our best observers continue to be Larry Lovell, Howard Landis and Leonard Kalish. We also continue to get a few requests for information on the construction of PEP equipment, and our latest material is sent to them.

On the revision of the PEP Manual, we finally have the data needed on the use of nomographs for atmospheric extinction determination, which should allow us to complete this project.

I have asked the President to replace me as the chairman of this committee. I have been chairman for some eight years. There are others who are doing valuable work and can carry on. I will continue to support the work of the committee.

*New chairman: Howard J. Landis
2395 Wood Hill Lane
East Point, Georgia 30344

VARIABLE STAR ATLAS
ADVISORY COMMITTEE, Chairman: Clinton B. Ford

As of 5/23/75, the status of the AAVSO Variable Star Atlas project is as follows:

Charts nos. 1 - 53: Completed and checked by Henry Specht.
Final copies soon to be ready for Headquarters.

Charts nos. 54 - 69: Drafting completed and ready to be sent to Henry Specht for checking.

Chart no. 70 (and others)
Currently being drafted by Charles Scovil.

Since the total number of Atlas charts is to be 178, basic drafting is evidently about 40% completed, instead of 50% as envisioned by April 1975 in the original two-year VSA prospectus (March, 1974).

Allowing for accelerated effort in the near future, it appears that the VSA project (drafting + checking + approval by Headquarters) will not be completed by the end of the two-year contract term (i.e. March, 1976). Some extension of the contract will probably be necessary at that time.

Sample VSA chart sheets as exhibited to various observers and observing groups in the past six months have met with favorable comment. In particular, observers in South Africa were enthusiastic during a visit made there by Messrs. Scovil and Ford during February, 1975. Drafting for the southern hemisphere section of the Atlas will shortly be under way, and contacts with observers in New Zealand and Australia as well as in South Africa, are being made to obtain fully up-dated material from them for inclusion in this section.

CLASSICAL CEPHEIDS, Chairman: Thomas A. Cragg
Hale Observatories
Mt. Wilson, California 91023

A paper has been prepared discussing in detail the results of the data analysis for observations made from JD 2,441,000 to 2,442,000. Nearly twice as many observations were received during the second 1000 day interval as during the first, almost certainly due to the communication efforts of Pat Mahnkey. As a result, reasonably good light curves were available for more stars.

Current activity includes making field charts for a significant number of new stars. Some of these are the following:

<u>Design.</u>	<u>Name</u>	<u>Period</u>	<u>Range</u>	<u>Type</u>
013057	RW Cas	14 ^d .7943	8.62 - 9.76V	Cδ
042248	BM Per	22.9519	11.4 - 13.3 p	Cδ
044242	SV Per	11.12875	8.58 - 9.36V	Cδ
045240	AN Aur	10.2906	10.16 - 10.83v	Cδ
050542	SY Aur	10.1443	8.75 - 9.37V	Cδ
072125	SS CMa	12.3620	9.37 - 10.36V	Cδ
073428	VZ Pup	23.1640	8.92 - 10.32V	Cδ
075428	AQ Pup	29.8568	8.12 - 9.39V	Cδ
074325	AD Pup	13.5940	9.31 - 10.36V	Cδ
234550	CS Cas	14.73765	11.48 - 12.88V	CW
234758	RY Cas	12.13726	9.40 - 10.36V	Cδ

Pat Mahnkey's preliminary study of ST Pup shows a period within the range given in the Second Supplement of the GCVS. Two other stars, RX Lib and AV Sgr, are to be studied soon, and more observations are requested.

Work on the current report indicates two allied fields of study which should prove interesting, observer k-factors and the color relation between PEP(V) and Visual (v). Evidence is mounting to indicate that PEP(V) and visual (v) are not as compatible as one might like to think!

Preface to Treasurer's Report

It is redundant to say that inflation has hit us -- but it has. The cost of our IBM equipment has risen substantially, as have punch cards. Paper for mimeo has gone up dramatically. We have had to get a new postage meter, which has increased costs; and soon postage will be up again.

With the loss of blueprints for charts, Mrs. Mattei has had to find other means of producing them. Ordinary Xerox would not make satisfactory copies. She has found a method to make good clear charts without wasting labor on our part. This increased cost has had to be passed on to the members. After our first set evoked complaints that the paper was too thin she had to go to a heavier paper stock, thereby further increasing the cost. We regret the increased cost to members, but it is necessary.

As of 31 March, 1975, an unusually large number of members (about 300) have not paid their dues. Our funds from this source are down.

We have had to make extraordinary outlays for the new charts and for atlases during this period. General printing costs have risen dramatically. For example, five years ago we obtained 2000 copies of the Manual, whereas today the same