

## COMMITTEE REPORTS

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

1975 may well be called the year of the nova. The earlier part of the observing year produced several novae, found photographically, which got no brighter than 8th magnitude. On June 15th, Nova Scuti (185007) was photographically discovered by Dr. Wild of Bern, Switzerland. Many predisccovery photos were found, including those of Peter Garnavich and John Bortle.

On August 29, near the close of our observing year, Honda was the first independent discoverer of Nova Cygni (210847), the brightest nova in 33 years. Among many other independent discoverers, were Nova-searchers Roger Callus and Manfred Dürkefälden, who were 2nd and 3rd to call Smithsonian, Peter Garnavich, who again had predisccovery photos (8/27-9.6, 8/28-7.5), William Dillon, George Kelley, and Stephen O'Connor. Mean maximum 1.7 appeared to have taken place on the evening of 8/30.

The nova discoveries notwithstanding, 1975 was an active year for Nova Search. Three common observing areas were added to the list of areas thought to be most likely to produce novae.

Observers are asked to first observe their assigned areas before checking the common areas. These are:

No. 15 in Cepheus

Nos. 33 & 34 in Perseus/Andromeda

Nos. 99, 107, 108 & 119 in Scutum/Sagittarius.

Through an error, the chairman reported the observations made during September 1974 with his report of last year. To correct this the following report covers observations made between October 1, 1974, and August 31, 1975, and reported by September 30, 1975.

<u>Observer</u>	<u>Location</u>	<u>Affiliation</u>	<u>Areas Searched</u>	<u>Total Obs.</u>
Carmine Borzelli	N.J.	AAVSO	38	562
Tristan Brelstaff	U.K.	BAA	5	225
Roger Callus	Netherlands	BAA	1	3
William Dillon	Virginia	AAVSO	6	147
Manfred Dürkefälden	W. Germany	AAVSO	141	691
Alan Ference	Pennsylvania	AAVSO	1	9
Peter Garnavich	Maryland	AAVSO	2	53
Robert Harnois	Massachusetts	AAVSO	2	4
Derek Hartley	U.K.	BAA	2	40
Charles Howard	N.J.	AAVSO	5	187
Tim Hrutkay	Pennsylvania	AAVSO	2	6
Robert Hunter	Ohio	AAVSO	3	31
Robert Luoma	New York	AAVSO	3	30
Herbert Luft	New York	AAVSO	1	13
Peter Martin	Australia	BAA	4	80
Ian Robinson	Australia	BAA	5	156
Frank Traynor	Australia	BAA	2	53
Thomas Wilson	W. Virginia	AAVSO	6	251
				<u>2,541</u>

Of the 18 observers, 7 submitted reports for all months, 1 for 10 months, and 2 for 9 months. The total, covering 180 areas exceeded the previous report (13 months) by over 300 observations.

In addition to visual Nova Search, several observers are making photographic searches. These include Peter Garnavich, Robert Hunter, and Thomas Wilson.

1975 was relatively quiet with respect to supernovae. Materials for visual and photographic SNS programs will be available shortly from the chairman. Materials for the visual and photographic NS program are available from him now.

My sincerest thanks go to all Nova Searchers, verifiers, the NS Committee, and AAVSO Headquarters for having made 1975 the first positive year concluded in a long time. It goes without saying that it will not be the last positive year. More observers are still needed for the programs.

A report of this committee will appear in a future issue of the BAA Journal.

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

During the past 12 months, 31 observers submitted 10212 observations in an endeavor to time 762 minima of 95 eclipsing binaries. Unfortunately, a few of these minima will have to be discarded due to incomplete light curves or other reasons. But we feel certain that when final evaluation has been completed, well over 95% of these minima will be found valid and will be published. This represents a tremendous increase of activity over any similar period since the inception of the AAVSO eclipsing binary program and is a 170% increase over the previous 12 month period in the number of minima reported!

During the past several years our coverage of the EB program stars had gradually improved until we usually missed only about 20 stars each year. In the current reporting period we received useful data on all but three program stars! The response by observers to our appeals to concentrate on the more difficult, rarely observed stars has been outstanding. Philip Atwood, Walter Farrar, Ernst Mayer, Gerry Samolyk, and Gary Wedemayer, as well as others, have been very successful in this respect. The listings given here include the number of minima observed for each star.

#### PROGRAM STARS OBSERVED

RT And	16	TV Cas	6	YY Eri	33	FL Ori	3
WZ And	6	AB Cas	4	SZ Her	13	U Peg	30
XZ And	9	U Cep	13	TU Her	6	TY Peg	5
AB And	54	XX Cep	6	CT Her	6	$\beta$ Per	2
RY Aqr	2	EG Cep	23	AV Hya	5	Z Per	4
CX Aqr	11	U CrB	4	SW Lac	49	RT Per	4
XZ Aql	1	W Crv	3	VX Lac	5	ST Per	5
OO Aql	36	RV Crv	1	Y Leo	9	Y Psc	2
V342 Aql	5	Y Cyg	13	T LMi	3	U Sge	3
V346 Aql	7	ZZ Cyg	12	$\delta$ Lib	1	RW Tau	3
WW Aur	15	V477 Cyg	3	EW Lyr	5	X Tri	16
Y Cam	4	W Del	5	FL Lyr	4	W UMa	31
SV Cam	20	TT Del	5	RU Mon	4	TX UMa	7
AL Cam	9	FZ Del	7	U Oph	5	VV UMa	8
R CMa	21	Z Dra	10	SX Oph	2	XZ UMa	14
RW Cap	1	TW Dra	1	EQ Ori	1	RU UMi	10
RZ Cas	36	AI Dra	3	ER Ori	37	AG Vir	4
						BU Vul	17

## ADDITIONAL STARS OBSERVED

TW And	1	UZ Dra	1	RV Oph	1	TY Pup	1
AR Aur	1	BH Dra	1	FO Ori	1	XZ Pup	4
AD Boo	1	RW Gem	1	AQ Peg	1	AN Pup	1
SX Cas	2	U Her	1	XZ Per	2	AU Pup	1
QQ Cas	1	RX Her	1	DM Per	1	V505 Sgr	1
ZZ Cep	1	UV Leo	2	V Pup	1	ET Tau	1
RZ Dra	3					HU Tau	1

A number of stars have been added to the EB program and will be included in the 1976 ephemeris. Others are being considered for future program expansion. Most of these are listed in Bulletin No. 36, but final selection will depend upon observer response.

A list of 230 minima, including essentially all those we observed during 1970, appears elsewhere in this issue of the Journal and continues the listing published in Vol. 3, page 60.

RR LYRAE, Chairman: Marvin E. Baldwin

Within the past 12 months, five observers made 2617 observations of 30 RR Lyrae stars. Stars observed are listed here with the number of observations of each star indicated.

SW And 235	TZ Aur 21	TV Boo 24	RR Cet 68	DH Hya 8
XX And 65	BH Aur 62	TW Boo 74	XZ Cyg 505	RR Leo 77
AC And 127	RS Boo 66	UU Boo 51	DM Cyg 76	TV Leo 13
AT And 126	ST Boo 36	UY Boo 129	RR Gem 66	WW Leo 47
SW Aqr 7	SW Boo 80	YZ Boo 72	SZ Hya 56	SZ Lyn 31
CY Aqr 253	SZ Boo 26	TT Cnc 133	VX Hya 27	AV Peg 56

Observation of these stars by highly qualified observers is continuing, to assure maintenance of a continuous year-to-year record of their behavior.

CHART DISTRIBUTION, AAVSO Headquarters

The following is a report of AAVSO Charts distributed from Headquarters from 10/1/74 through 9/30/75. A total of 480 orders was filled, including 110 sets for new members.

8 x 10 charts	15,645
Finder charts	686
Atlases	17

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

Since May, 1975, the following mailings of AAVSO preliminary chart copies have been made from the Secretary's office. Most mailings have been the result of requests from observers:

<u>Destination</u>	<u>No. of Addresses</u>	<u>Chart Copies</u>
U.S.A.	20	2,052
Canada	2	30
Other countries (4)	4	1,657
Totals	26	3,739

A more detailed breakdown of these figures is available. A total of four complete sets of the preliminary charts (now 812 charts per set) was mailed during the past six months.

The list of members actively engaged in new or revised chart production as of October, 1975, is the same as that given in the Committee's May, 1975, report. Comparison-star sequence information has been obtained from, or exchanged with, the following foreign variable star workers during the past six months:

M. V. Duruy	(France)	AFOEV
E. Schweitzer	(France)	AFOEV
M. D. Overbeek	(So. Africa)	ASSA
G. Comello	(Netherlands)	Kapteyn Lab., Groningen Univ.
J. E. Isles	(England)	VSS, BAA

The total number of variables previously uncharted in AAVSO format, but now covered by issues of new or revised charts made since publication of the June 1974 Catalog of Preliminary Charts, now stands at 37. As in the Committee's May, 1975, report, the backlog of usable material for further production of such new charts continues to increase. A newly revised Catalog listing all available preliminary charts will probably be required by June, 1976. The Tsesevich, et al. Atlas of Finding Charts of Variable Stars (Moscow, 1971) continues to be a valuable reference work.

An entirely new Chart Committee project now appears possible through the cooperation of Mr. C. Papadopoulos of the Astronomical Society of Southern Africa (ASSA), who has very kindly furnished the Committee with an excellent set of "b"-scale photo negatives covering (to date) 62 different far-southern variable star fields. These photos show all field stars to at least magnitude 13.5(v) and can easily be enlarged to produce "d" or "e"-scale charts showing fainter comparison stars than the charts for southern variables which are currently available through the Royal Astronomical Society of New Zealand (RASNZ). Such a project might be undertaken in cooperation with both of the above southern hemisphere organizations.

PHOTOELECTRIC PHOTOMETRY, Chairman: Howard J. Landis  
2395 Wood Hill Lane  
East Point, Georgia 30344

Our active observers continue to be Larry Lovell, Leonard Kalish, and your chairman. In the period I have been chairman, those who requested information about photometry have also asked about the AAVSO PEP observing "Program." To these people I expressed the need for more PEP Observers and greater activity in order that we might be able to say in the future that we do in fact have such a program.

There is a good range of observing projects that can be carried out with photoelectric equipment mounted on moderate-size telescopes, and with proper supervision the data can be of professional quality. Just as visual observers' data are appreciated by many professional astronomers, most assuredly photoelectric data are too.

Therefore I encourage anyone who is attracted to the serious study of variable stars, who is endowed with a fair amount of patience, and who enjoys working with precision electronic equipment, to contact me.

VARIABLE STAR ATLASADVISORY COMMITTEE, Chairman: Clinton B. Ford

As of 10/15/75, the status of the AAVSO Variable Star Atlas project is as follows:

1. Charts nos. 1 thru 13: Totally completed, checked and final corrections made per Headquarters requests.
2. Charts nos. 14 thru 77: Totally completed and checked; final copies are now ready for submission to Headquarters except as noted in item 3 below.
3. Charts nos. 73 thru 77: Still in hands of Henry Specht for final checking.
4. Charts nos. 78 thru 150: Master chart blanks assembled and drafted, showing numbered coordinates but no variable star data.
5. Charts nos. 151 thru 178 (end): Assembly and drafting of masters in process.

A meeting of some members of the VSA Committee was held at AAVSO Headquarters on 13 July 1975. Present were: Director Mrs. Mattei; Secretary Mr. Ford; President Mr. Scovil; Treasurer Mr. Mayall; and Honorary Member and Former Director Mrs. Mayall. The following agreements were made between the Committee as supervisor of the project and Mr. Scovil as consulting draftsman and producer of the Atlas charts:

1. Following completion of the current ring of charts with all data shown, further work shall concentrate, for the present, only on production of assembled master chart blanks, these blanks to show coordinates with numbers plus stars as shown on the SAO originals, but no variable star data (as in items 4 and 5 above).
2. Work on these assembled master blanks shall proceed until the total of said blanks thru chart no. 178 is completed, at which time Mr. Scovil shall return to the entering of variable star data on earlier uncompleted charts (i.e. nos. 78 thru 178 per above status report).
3. The final date for completion of the VSA project, as stated in the existing contract signed by Mrs. Mattei and Mr. Scovil and dated June 24, 1974, shall be extended under its present terms, subject to approval of the AAVSO Council, from 1 March 1976 to 1 March 1977.
4. Various details concerning chart format and methods of checking shall be adhered to, as later set forth in a letter from Mr. Mayall to Mr. Scovil dated 30 July 1975.

The VSA Committee acknowledges that the Atlas project is not proceeding as rapidly as originally planned in its March, 1974, prospectus. The completion of all master blanks (per item 5 above) will provide the basic charts for completion of the Atlas by others in the event Mr. Scovil's services become no longer available.

OCCULTATIONS, Chairman: George Fortier  
63 Devon Road  
Baie D'Urfe, Quebec H9X2W7, Canada

At the 1974 Fall meeting I took over the chairmanship of the Committee from John Bortle. The changeover may somehow account for a much decreased reported occultation total of 31 for the 1974-1975 fiscal year. The four observers were H. Luft,

C. H. Holton, R. A. McCutcheon, and G. Fortier. One request for information was answered.

The sporadic and meager participation in occultations by AAVSO members raises the question of the usefulness and desirability of this Committee. This problem was discussed in detail at the meeting of the Council and it was decided that the fate of the Committee would depend on members' participation over the next year.

We presently function to aid and instruct in occultation work and in addition act as liason with H.M.N.A.O. in England, the world headquarters for occultation work. Possibly the appearance of such organizations as IOTA have rendered this AAVSO function redundant.

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

The status of the AAVSO telescopes remains the same as was reported in May, 1975, with the following exceptions:

1. The 4-inch refractor formerly on loan to D. B. Pickering has been recovered from his son, James.
2. A trip to Massena, N.Y., by the chairman determined that the telescope formerly on loan to Karl Wells is not recoverable.
3. Further search of the effects of Richard Hamilton has turned up a plate-glass mirror of approximately 12 inches diameter. This is apparently the mirror made and later donated by Donald F. Brocchi (the man who drafted most of the "blueprint" charts). The mirror is f/7, is not aluminized, and is available for sale. The figure has not been tested, but was described by Mr. Brocchi as fully adequate for variable star work.
4. A 3 3/16-inch refractor made by Henry Fitz has been returned. There was some confusion in the records concerning this instrument, as it fits the same description as the telescope on loan to Karl Baltz.
5. Thomas Williams has returned the 4 1/2-inch Fitz telescope which had been on loan to him, and has donated the modern finder and focusing device he had added.

The two Fitz telescopes and the 4-inch from Pickering are now offered for sale. They are antiques and will be sold on that basis. Full descriptions and photos are available from the chairman. A small charge will be made to cover the cost of photos if they are requested.

It has been determined that the 8-inch Fernald reflector on loan to Chandler Holton is demountable from its pier, and is therefore transportable. This telescope is available for loan.