

ANNUAL REPORT OF THE DIRECTOR OF THE AAVSO
FOR THE YEAR ENDING SEPTEMBER 30, 1962

It gives me great pleasure to present this Annual Report of the Director for the fiscal year 1961-62. We are now starting on our second half century, and we will all have to work hard to live up to the record of the first 50 years.

FINANCES. Thanks to the 2-year grant given us by the National Science Foundation, we have been able to carry on the major work in headquarters. But we have just received the last installment, and must look elsewhere for help to carry us through the next years. Any help from our members, in the form of contributions or constructive suggestions will be more than welcome.

The National Bureau of Standards has been very kind in its financial support for the AAVSO Solar Division, and has continued it for another year. We also owe our gratitude to the Astronomical Society of the Pacific for their generous contribution toward the publication of the next two Quarterly Reports containing observations of variable stars.

The reports of the Treasurer and Chairman of the Endowment Fund give details of the state of our finances and the growth of the Endowment Fund. Members have helped the Endowment Fund by ordering books through AAVSO headquarters. Over 100 dollars has been contributed in this way.

One of our members has formed the delightful habit of sending a \$5.00 check with each monthly report of variable star observations. In fact, one month when he could make no observations, he sent his Endowment Fund contribution anyway!

REQUESTS FOR INFORMATION. During the year, we answered about 650 requests for information about variable stars, the AAVSO, and astronomy in general. Many of the inquirers sounded like good prospective observers, and were sent copies of the Manual for Observing Variable Stars.

MEMBERSHIP. The number of people who apply for membership in the AAVSO increases with the number who ask for information. At the October 1961 meeting we elected 34 new members, only 2 less than the record number of the previous Spring meeting. At the 1962 Spring Meeting at Georgetown University, we broke all records with 65 applications, a total of 99 new members for the year. The best news of all is that a large proportion of these new members have become active observers.

Several of our Annual Members have changed to Sustaining Membership. We try to keep our Annual dues very low, and hope that more of our members will change to Sustaining and help with our operating and publishing costs. Few organizations have dues as low as the AAVSO, and we may find it necessary to raise them, unless we have more Sustaining members!

SUBSCRIPTIONS TO PUBLICATIONS. Twenty-eight libraries and observatories subscribe to our publications. In addition, the Mt. Wilson and Palomar Observatories subscribe to our Special Services, and we have been very pleased to answer their requests for special information.

MERIT AWARDS. At the 50th Anniversary meeting in October 1961, two Merit Awards were presented. The first one, the 15th Award by the Association, was given in absentia to Reginald P. deKock "whose constant vigilance of the morning and evening sky resulted in an invaluable contribution of over 100,000 observations of variable stars in the southern sky." The 16th Award was then presented to our Secretary and

Past President, Clinton B. Ford "in grateful appreciation of his moral and material support during trying times, his long observing record, and his service as Secretary and President. Through his efforts the Endowment Fund has been established on a firm foundation."

LIBRARY. The McAteer Library received over 300 items during the year, including publications and reprints, and about 20 books. Some new books are added to the Library as review copies sent by the publishers and some are gifts. The AAVSO Library contains many valuable old books of historical and reference value and we are now adding a shelf of more modern texts and references.

PUBLICATIONS. Quarterly Report 25 was published in February 1962 and contains observations made during the 400-day period between 1958 July 15 and 1959 August 18. It is the compilation of about 57,000 observations of 843 variable stars made by 207 observers. Two issues of the AAVSO Abstracts were published, containing papers presented at the October 1961 and May 1962 meetings. Bulletin 24 was published in December and contains the 1962 Predictions of Maxima and Minima of Long Period Variables. We also published a Membership List and List of Officers, and Annual Reports of the Director, the Treasurer, and the Endowment Fund. Reports of the Nova Search Division are included in the Variable Star Notes. Solar Bulletin and SEA (Sudden Enhancement of Atmospherics) Reports were sent to members of the Solar Division. Two Book Reviews were published; one in November 1961, one in June 1962.

Variable Star Notes were printed in each issue of the Journal of the Royal Astronomical Society of Canada. A new column entitled "The Director Reports" was started in the January-February 1962 issue of the Review of Popular Astronomy and has been continued in each subsequent issue. Tables containing the names of observers and the number of observations each contributed during the month are included in each of the magazines.

Each number of the Sky & Telescope magazine contains the American Sunspot Numbers as determined by the AAVSO Solar Division and lists the bright variables which should have maxima during the month.

As part of our 50th Anniversary celebration "The Story of the AAVSO" written by R. Newton Mayall was published in two parts in The Review of Popular Astronomy, and through the kindness of the editor, we distributed reprints to all members. Part III, containing statistics and vital records of meetings, officers, etc., was distributed in mimeograph form.

We owe our thanks to Clinton B. Ford for reprints of his article "Sidelights on Variable Star Observing," which appeared in the December 1961 number of Sky & Telescope.

The newest publication of the AAVSO is the "Manual for Astronomical Photoelectric Photometry". This was prepared by Donald Engelkemeir, with the help of John J. Ruiz and Lewis Boss, Chairman of the Photoelectric Photometry Committee. The printing costs were taken care of by Mr. Ruiz and all profits from sales go into the Endowment Fund.

A new edition of the Chart Catalogue was published which lists about 1000 charts, showing the identification of over 800 variable stars. The 1962 Julian Day Calendar was distributed to all members by courtesy of the Unitron Instrument Company.

ANNUAL SUMMARY OF OBSERVATIONS. The first year of the 2nd half century of the AAVSO has broken all records for number of observers and number of observations received. We received 67,459 observations from 270 observers from 22 countries during the year. A total of 1135 reports was received, making an average of 94.5 reports per month.

We received observations from 77 foreign observers, who totalled 27,984 observations, 41% of the total number received. The U.S.A. observers (193 of them from 30 states) made 39,475 observations, or 59% of the total.

Table I gives the breakdown by country and Table II the breakdown of the U.S.A. totals, by state.

TABLE I - COUNTRIES

Country	No. Observers	Total Obs.	Country	No. Observers	Total Obs.
Argentina	1	337	Japan	1	1735
Australia	8	1056	Mexico	3	3806
Brazil	10	680	New Zealand	3	239
Canada	13	1956	Portugal	1	171
Chile	17	6267	South Africa	4	8026
Congo	1	11	So. Rhodesia	1	71
England	1	65	Sweden	1	8
France	1	208	Switzerland	1	25
Germany	6	2217	Taiwan	1	426
Greece	1	141	Yugoslavia	1	4
Italy	1	535	U.S.A.	193	39475
			total	270	67459

TABLE II - UNITED STATES

Alabama	1	25	Louisiana	1	26	New Jersey	8	1948
Arizona	2	375	Maine	3	3494	New Mexico	1	497
California	39	6554	Maryland	2	34	New York	27	7117
Colorado	1	360	Massachusetts	9	1844	Ohio	8	4815
Connecticut	8	1856	Michigan	7	1060	Oregon	2	84
Florida	3	499	Minnesota	1	603	Pennsylvania	7	417
Georgia	1	20	Mississippi	2	20	Texas	9	793
Illinois	16	1401	Missouri	5	2321	Virginia	3	813
Indiana	2	50	Montana	4	691	Washington	2	171
Kentucky	2	217	New Hampshire	2	138	Wisconsin	15	1232
						total	193	39475

First place in number of observations was taken this year by Rodrigo de la Vega of Chile, who made 6,064 observations. He was followed by Reginald P. deKock, with 5,937, then came Edward Oravec with 3,467. Two more observers had more than 3,000: Cyrus Fernald with 3,379 and Domingo Taboada with 3,229.

In spite of many complaints about the weather, we received a goodly number of reports each month. The monthly totals ranged from 3,930 in March, to 14,660 in September. The extra large number in September was partly due to the receipt of large yearly reports from two of our foreign observers: de la Vega sent 5,654, and Overbeek 1,162.

Table III lists all of the observers in order of their totals. Thirty-four observers made observations of 13.8 and fainter, and each is identified by the letter S (Inner Sanctum) after his total. Twenty-five observers sent their reports in each month, 12 more missed only one month, and 8 missed two months each. It is a great help to receive the observations regularly, for then we can have the current information about the activities of the variables available at short notice.

TABLE III - AAVSO OBSERVERS

1961 - 1962

1	Rodrigo de la Vega L., Chile	6064	35	Raymond R. Dudley, Calif.	398 S
2	Reginald P. deKock, S. Africa	5937 S	36	Mario Fernandes, Germany	390
3	Edward G. Oravec, New York	3467	37	Jeremy H. Knowles, Colorado	360
4	Cyrus F. Fernald, Maine	3379	38	Art Gonthier, Mexico	358 S
5	Domingo Taboada R., Mexico	3229	39	Wayne Lowder, New Jersey	349 S
6	Leslie C. Peltier, Ohio	2928 S	40	Kenneth Fuller, Arizona	345
7	Thomas A. Cragg, California	2842 S	41	Ralph Buckstaff, Wisconsin	338
8	Robert M. Adams, Missouri	2101 S	42	Raymond R. Thompson, Canada	338
9	*Hideo Honda, Japan	1735	43	Marcos Severin, Argentina	337
	*plus 5 ^m AE Aqr		44	Francis P. Morgan, Canada	331
10	*Stephen E. Burt, Massachusetts	1687 S	45	Edgar M. Paulton, New York	325
	*plus 10 ^m V Sge, 78 SN searches		46	Diane Lucas, Ohio	317
11	Ferdinand Hartmann, New York	1662	47	Rodney Norden, Virginia	298
12	Carolyn Hurless, Ohio	1448 S	48	Albert Sharpless, Florida	277 S
13	Werner Braune, Germany	1425 S	49	Arthur Pearlmutter, New York	259
14	Larry Bornhurst, California	1163 S	50	Charles McPherson, Montana	242
15	Michiel D. Overbeek, S. Africa	1162 S	51	Ronald Royer, California	237 S
16	C.J. Renner, Michigan	995 S	52	Robert Shayler, California	223
17	David W. Rosebrugh, Conn.	958	53	*Frank J. Kelly, Florida	221 S
18	L.L. van Zyl, S. Africa	904		*plus 5 ^m AE Aqr	
19	Charles Giffen, New Jersey	710 S	54	Hector Ayala R., Texas	219
20	Clinton B. Ford, Connecticut	684 S	55	Bruce Gardner, Pennsylvania	219
21	R.C. Shinkfield, Australia	640	56	William Miller, New Jersey	219
22	Christopher Spratt, Canada	635	57	Paul Ahnert, Germany	217
23	Curtis Anderson, Minnesota	603	58	Paul Hartmann, Kentucky	214
24	Jerome Kunicki, Wisconsin	541 S	59	Albert Jones, New Zealand	212
25	G.B. Lacchini, Italy	535 S	60	Alphonse Oberstatter, France	208
26	Allen C. Montague, Illinois	525	61	R. Terence Dickinson, Canada	207
27	Lancaster Hiatt, Virginia	500	62	Paulo Mourilhe S., Brazil	202
28	Marvin E. Baldwin, New Mexico	497	63	A. Thomas Murphy, California	192
29	William De Forge, New Jersey	436	64	Paul Knauth, Texas	190
30	Leif J. Robinson, California	434	65	Donald Bradley, New York	189
31	*Donald Engelkemeir, Illinois	432	66	D.W. Orchiston, Australia	179
	*plus 4 ^h 12 ^m PEP & 12 ecl. Var. min.		67	Claude Carpenter, Calif.	178 S
32	Chang-Hsien Tsai, Taiwan	426	68	D.A. Sherwood, Canada	178
33	R.F. Swanberg, Montana	425	69	*John J. Ruiz, New York	174
34	Craycroft F. Wilson, New York	424		*plus 31 Cyg, RZ Cas, PEP	

continued

70	Joao L.Q. Pena, Portugal	171	123	Jair Barroso, Brazil	37
71	Charles W. Cannon, California	168	124	Miguel Valdez, Chile	37
72	Donald E. West, Washington	167	125	K. Menzel, Australia	36
73	*Keith Axelson, California *plus 2 ^h 42 ^m flare stars	159	126	John Ahearn, New York	35
74	Michael McCants, Texas	155	127	A.R. Ball, Wisconsin	35
75	Gregg Ruppel, Missouri	153	128	Douglas Gladden, Texas	35
76	Ernest Lorenz, California	151 S	129	Paul Skaritka, New York	33
77	O.M. Erpenstein, California	142 S	130	Roger S. Kolman, Illinois	31
78	Rainer Mende, Germany	142	131	Bob Provin, California	31
79	Constantin Chassapis, Greece	141 S	132	Glenn Williams, Illinois	31
80	Cesar Cusatis, Brazil	140	133	Kent DeGroff, California	30
81	J.G. Craig, Canada	135	134	Peter B. Lehmann, Germany	30
82	Harry V. Roberts, Illinois	135	135	George Lovi, New Jersey	30
83	Carl Anderson, New Hampshire	133	136	Herbert O. Seavey, Arizona	30
84	John L. Norczyk, New Jersey	129	137	Tom McFarland, Wisconsin	27 S
85	Czeslau L. Barczak, Brazil	123	138	DeLorne Diedrich, Ohio	26
86	Stephen Jeffery, New York	119	139	George Glagola, Ohio	26
87	Margaret Olmsted, Maine	114	140	Stephen Schiff, Louisiana	26
88	Philip J. Peters, California	109	141	Oliveiros C. Tavares, Brazil	26
89	John Pazmino, New York	105	142	Frank Bateson, New Zealand	25
90	Walter Hampton, Connecticut	104	143	Ken Fitzgerald, New York	25
91	Gary Bream, Pennsylvania	97	144	Niklaus Hasler-Gloor, Switzer.	25
92	Everett Morrow, California	87 S	145	Thomas C. Williams, Alabama	25
93	W. I. Lowry, California	86	146	Frederick Fallon, Maryland	24 S
94	Michael Sinneck, New York	85	147	Charles Aronowitz, New York	23
95	James Della Penna, Mass.	83	148	David Pechtold, Illinois	23
96	M. Bainy, Australia	79	149	Neil Travis, Michigan	23
97	J. Russell Smith, Texas	77 S	150	S.C. Venter, S. Africa	23
98	Peter A. Brennan, Illinois	76	151	Bruce K. Buckman, Australia	22
99	David Kasper, New Jersey	73	152	Dan Leithoff, Oregon	22
100	Edward A. Halbach, Wisconsin	72 S	153	Dennis Matthies, Wisconsin	22 S
101	R. Lansing Hicks, Connecticut	72	154	David L. Carmichael, Missouri	21
102	R.H. Bicknell, So. Rhodesia	71	155	Jerome Hequembourg, Mass.	21
103	G. Vodrazka, Australia	68	156	Michael Meiley, Pennsylvania	21
104	Pat Cook, Wisconsin	65	157	W.B. Albrecht, Wisconsin	20
105	George Diedrich, Ohio	65	158	Robert F. Brady, Georgia	20
106	G.O. Rawstron, England	65 S	159	Howard Nightingale, Australia	20
107	Patrick V. Rizzo, New York	64	160	Harry Seaman, Wisconsin	20
108	Ronald M. Bales, Oregon	62 S	161	Theodore Szybowicz, Michigan	20
109	Mario Locks V., Chile	62	162	Edward Schmidt, Montana	19
110	Edward Stewart, Texas	61	163	Mario R. Carvalho, Brazil	18
111	Jose Luis da Silva, Brazil	59	164	Edgar Everhart, Connecticut	18
112	Anthony Fidura, Pennsylvania	59	165	Nona Ledbetter, Mississippi	18
113	Wilson H. Baade, Brazil	58	166	Hans D. Isenberg, Illinois	17
114	Robert Hawkins, Canada	54	167	Don C. Jardine, Illinois	17
115	Joel S. Levine, New York	52	168	Richard Davis, Massachusetts	16
116	Robert Pohl, Wisconsin	50	169	Margaret W. Mayall, Mass.	16
117	David L. Rector, Illinois	48	170	John R. Monahan, Illinois	16
118	Emilio Anderfuhren, Chile	47	171	Jerome Walsh, Wisconsin	16
119	Edwin E. Friton, Missouri	41	172	B. Hobart Audet, Virginia	15
120	John S. Lynch, Texas	39	173	Douglas Bash, Wisconsin	15
121	David A. McAuslan, Canada	39	174	Carlos H. da Silva R., Brazil	15
122	Alan Van Til, Indiana	39	175	Donald Lammon, California	15
			176	John Yanos, California	15

continued

177	George Hein, New York	14	224	Stewart O'Byrne, Missouri	5
178	Juan C. Moroni, Chile	14	225	Rainer W. Pichl, Chile	5
179	Fran Reynolds, California	14	226	Alan Reed, California	5
180	Charles Ricker, Michigan	14	227	Chris Schell, Connecticut	5
181	Andy Roberts, Illinois	14	228	Elizabeth Socha, New York	5
182	Jack Harvey, California	13	229	James F. Wright, Canada	5
183	Tim Hunter, Illinois	13	230	Stephen Bieda, California	4
184	Wolfgang Quester, Germany	13	231	James Ellerbe, Yugoslavia	4
185	Tom Thorpe, California	13	232	Henric Gille, California	4
186	Gabriel Marcovits, Chile	12	233	Daniel Johnson, California	4
187	Leslie Sheldon, Canada	12	234	William L. Taylor, Ohio	4
188	H.E.M. Specht, Connecticut	12	235	Morgan A. Thomas, Washington	4
189	F.N. Traynor, Australia	12	236	Walter Zukauskas, Massachusetts	4
190	John Martellaro, Indiana	11	237	Juan Astudillo, Chile	3
191	L. Menager, Congo	11	238	Jon L. Bloomfield, Texas	3
192	William Romaniecki, Mass.	11	239	William H. Glenn, New York	3
193	David B. Williams, Illinois	11	240	Raul Manasevich, Chile	3
194	Dennis Erickson, Illinois	10	241	Walter L. Moore, Kentucky	3
195	Richard Harrison, Maryland	10	242	Walter Singer, Massachusetts	3
196	Herbert Koller, Canada	10	243	Richard E. Wend, Wisconsin	3 S
197	Jose Olivarez, Texas	10	244	William Winkler, Connecticut	3
198	Joseph Skipka, New York	10	245	Joseph A. Anderer, Illinois	2
199	Larry Anthenien, California	9	246	Joanne Cannon, California	2
200	James Breckinridge, Calif.	9 S	247	Bruce Gilligan, New Jersey	2
201	Edward DeGennaro, New York	9	248	Patricio Guerra, Chile	2
202	Donald Murray, Pennsylvania	9	249	Wayne Herrington, Mississippi	2
203	George Wallerstein, Calif.	9	250	D.E. Lewthwaite, New Zealand	2
204	Gunnar Darsenius, Sweden	8	251	Carlos Manasevich, Chile	2
205	Gordon W. Smith, Canada	8	252	Stephen P. Maran, Michigan	2
206	Albert Ullmann, New York	8	253	William McClure, California	2
207	Karl A. Wells, New York	8	254	Luiz Muniz B., Brazil	2
208	Les Berquist, California	7	255	Sam Zaretsky, New York	2
209	Charles Long, Wisconsin	7	256	William Abbey, Florida	1
210	Enzo Ortiz, Chile	7	257	Maria E. Bersano, Chile	1
211	Jane Douglas, New York	6	258	Jack Egger, California	1
212	Russell Ducott, Massachusetts	6	259	Mark Egger, California	1
213	Paulette Fote, New York	6	260	Emily Fernald, Maine	1
214	Jay Inge, California	6	261	Ricardo Gonzales, Chile	1
215	Cornelia Newton, California	6	262	J.G. Goodsell, California	1
216	James E. Olexa, Pennsylvania	6	263	Edward Harris, Massachusetts	1
217	Richard Tompkins, Penn.	6	264	George R. Kniga, Michigan	1
218	Eric Bruns, New Hampshire	5	265	T.R. McFarren, Ohio	1
219	Denis Dutton, California	5	266	Miguel Mena, Chile	1
220	Margarita Espinosa, New York	5	267	Tom Osypowski, Wisconsin	1
221	David Florkowski, Michigan	5	268	Carol Pankow, California	1
222	Paul Heath, Montana	5	269	Ed Pankow, California	1
223	Pedro Moroni, Chile	5	270	Fermin Pereyra, Chile	1

We were very pleased to have 104 new observers send in their first reports. And best of all, 67 of them sent more than one report and 12 of the remainder started work in September, so it looks as though we have added many more good observers to our ranks.

In August of this year we passed the milestone we have all been looking forward to - the 2 million mark - more details later.

SPECIAL PROGRAMS. At the request of Dr. George Herbig of the Lick Observatory, we have set up a special watch for faint maxima of a selected group of long period variables. Several variables, notably α Ceti and R Serpentis have been found to have extremely interesting changes of spectra at times, unusually faint maxima. We have arranged to let Dr. Herbig know if one of his group of variables seems to be approaching a faint maximum and if it is confirmed, he will alert other spectroscopists.

John Ruiz and Donald Engelkemeir are continuing their photoelectric determinations of minima of eclipsing variables. They cooperate in several international programs.

The variables in the Orion Nebula and other RW Aurigae-type variables are of special interest to several observers.

As a result of the observations we reported last year of the supernova in NGC 4564, several members have become interested in setting up a visual search for super novae. Stephen Burt has plotted charts for a number of galaxies and has checked them at the telescope. The Photographic Committee plans to get photographs of the regions of some of the galaxies which will show stars down to about 13th magnitude, to be used in the visual checks of the regions.

OTHER ACTIVITIES. Reports of other committees are given at the meeting, but I will mention them briefly. American Sunspot Numbers are supplied to the National Bureau of Standards by the Solar Division, under the Chairmanship of Harry L. Bondy, in addition to the very interesting work on the SEA and SES detection. The Occultation Committee (Roy Seely, Chairman) continues to send observations of occultations to the International Center in England.

The Photoelectric Photometry Committee has prepared the very fine Manual I mentioned under Publications. They are doing fine work in helping other amateurs get photometers set up and in working condition. The Photographic Committee under the Chairmanship of Charles H. Giffen has started a very fine and ambitious program. The first bulletin by the committee was issued in the summer and received much favorable comment.

Richard W. Hamilton, Chairman of the Chart Committee reports very great activity with charts. The distribution of charts has been transferred to the Headquarters office for reasons of economy and for greater ease in handling, and more than 10,000 were sent out during the year.

The Nova Search Committee under the Chairmanship of George Diedrich has had a very active year, although no bright nova has been discovered. Stephen Burt is undertaking a special search in a region in Aquila. He has made up his own chart of the region, based on the BD stars, and has added fainter ones from other sources. In limited areas he is able to watch down to about 10.5 magnitude.

PERSONNEL. I am very glad to report that Mrs. Florence Campbell Bibber continued as our full-time AAVSO assistant. Our AAVSO member, Stephen Burt, did some part-time work after school hours and on weekends during the school year, and full time work for about two months during the summer. He has entered Wesleyan University this fall so we will miss him this winter. We were also very glad to have young John Bibber do some part-time work for us during the summer. Mrs. Bibber carried

on the work in the office very efficiently while I was in Germany this summer attending a special variable star conference and other astronomical meetings.

I would like to take this opportunity to thank the officers of the AAVSO and all our members and friends for the help they give us in innumerable ways.

Respectfully submitted,

MARGARET W. MAYALL
Director, AAVSO

NOTE ADDED IN PRESS. The 2,000,000 mark.

On August 1, 1962 the total number of observations received from AAVSO observers stood at 1,995,871, and by August 15th 3554 more had been received, only 575 below the big milestone. The reports were numbered as they were received from the mail carrier and on August 20th the winning observation was received. The lucky observer was Leslie Peltier, who needs no introduction to any one interested in variable stars. Observation 2,000,000 was made on JD 2437872 and was of the RV Tauri-type variable 165905 TX Ophiuchi, magnitude 11.5, a deep minimum of that star.