

24TH ANNUAL REPORT OF THE RECORDER
FOR THE YEAR ENDING SEPTEMBER 30, 1955

The year 1954-55 has been a year of the greatest contrasts in the history of the AAVSO. Financially it has been one of the most trying we have ever had, but it has reached heights scientifically and in the loyalty and enthusiasm of our members and friends.

The Recorder has had to spend a great deal more time than she should on the major problem of raising funds. In the AAVSO files there is much fine material for research programs, but work on those can be postponed better than our immediate need for money to keep our office open. The grant we received from the National Science Foundation early in 1954 covered our major expenses in compiling, studying and preparing for publication the observations furnished by our observers, but it was only a one-year grant. Since January 1955 the Recorder has volunteered her services in order to keep the work going and to stretch our meager funds as far as possible.

In addition to the problem of raising funds for current expenses, the Endowment Fund has been a major consideration. Good publicity is always a great help in any fund-raising campaign. Through our concerted efforts there has been mention of the work of the AAVSO in such nationally-known publications as *Mechanics Illustrated*, the *Saturday Evening Post*, *Life*, *Think*, *Scientific American*, and United Press releases. The Treasurer's report will give details of the results of our campaign; it is sufficient to say here that the response has been very enthusiastic. Contributions from our members and friends have been very generous, but we still need some large gifts to make us self-supporting. We can use only the income from the Endowment Fund, which at present provides only a small percentage of our budget.

Throughout the year, we have had many requests from professional astronomers for special information and light curves of interesting variables. We are always pleased to be able to supply any such information. Recent dates of maxima for about 420 variables were determined for use in the second edition of the *General Catalogue of Variable Stars* now being prepared by Professor Kukarkin and his co-workers. It is not a one-way service, for the observatories have been very generous in their help to the AAVSO. I particularly want to mention the members of the staffs of the Warner and Swasey, Lick, and Mount Wilson observatories who have indicated their willingness to help us in identification problems and to supply photovisual plates for new blueprint charts.

It was my privilege to attend the Ninth General Assembly of the International Astronomical Union held in Dublin in September of this year, and to speak for the AAVSO at the meetings of the Commission on Variable Stars. Members of the Union were enthusiastic in their appreciation of the work of the AAVSO, and of the other amateur observing groups. At my request, an informal meeting was held for those interested in the programs of the variable star associations. Representatives of the British, Scandinavian, Italian, and Dutch associations were present, as well as some professional astronomers who suggested programs they would like to see carried out.

The 13th Merit Award of the AAVSO was presented at the 1954 Annual Meeting to Roy Seely, "In recognition of his faithful devotion to the interests of the Association for over thirty years, of his loyal services as President and Secretary, and especially of his untiring efforts in producing new variable star charts." The beautifully illuminated certificate was the final work of our Patron member, Fred E. Jones.

As a result of our plea for sustaining members (those who pay \$10 or more per year), we elected three at the Fall meeting and ten at the 1955 Spring meeting. In the fall we also elected 31 new annual members, and in the spring one life member and 25 annual members.

During the year we suffered the sad loss of six of our most beloved members: D. F. Brocchi, Morgan Cilley, Charles Elmer, Neal Heines, Fred Jones, and Joseph Meek.

Requests for Information. The publicity we received during the year brought in 345 requests for information about the AAVSO. 119 of these were from people who had telescopes and seemed genuinely interested. They received the information kit containing the instruction booklet, application blank, etc. A special kit was sent to the many children who asked for "all information about the stars, sun, planets, etc." Several children are contributing observations and waiting anxiously for their 16th birthdays so they can become members.

Special Contributions from Members. This year, as usual, our members and friends were very generous in coming forward with help when we needed it. Mrs. Phoebe Haas has continued her fine work in bringing up-to-date the 10-day mean values of observations for the mean light curves. Lewis Boss helped with some of our mimeographing, particularly with Bulletin No. 8. Dr. Paul Watson gave us enough copies of the 1955 Graphic Time Table of the Heavens to distribute to all of our members. The United Scientific Company printed the Julian Day Calendar in a very attractive and useful new form, and distributed it very widely among their clients as well as AAVSO members, thus giving the AAVSO some good publicity. Ralph Buckstaff generously helped the Solar Division by taking care of printing the Stonyhurst Discs and a guide for the classification of sunspots. Newton Mayall paid the legal advisors for the AAVSO to set up the new constitution, and to give legal aid in matters relating to the Endowment Fund. He also furnished office supplies whenever they were needed.

Clinton Ford gave us a beautiful new Nikor paper cutter -- a safe one guaranteed to cut paper and not fingers, as the old guillotine type constantly threatened to do. New members now receive a very beautiful membership certificate, designed by Edgar Paulton. It makes an added incentive for annual members to change their status to sustaining membership.

Charles Aronowitz very kindly helped the Endowment Fund by typing addresses on a batch of envelopes. Two of the Recorder's friends assisted with the Linedex typing: Mrs. Dorothy W. Saltmarsh spent many winter evenings at 4 Brattle Street from six pm until after midnight, and Mrs. Regina Gawlinski was also very helpful.

Library. During the year, the AAVSO Charles Y. McAteer Library has received 109 publications, 339 pamphlets, reprints, and circulars, and 16 bound volumes. Harry Bondy very kindly bound eight volumes of publications for us: five of Sky and Telescope magazine, two of the Journal of the Royal Astronomical Society of Canada, and one of the last of the Popular Astronomy "Variable Star Notes" (1946-1951).

Telescopes. John Welch has spent a very busy year repairing telescopes and straightening out the records on the many telescopes out on loan to members. In the past years scopes were often transferred from one member to another, and very incomplete records are available. Cyrus Fernald has very generously donated to the Association a 2.4 inch Unitron refractor, complete with equatorial mounting and accessories.

Publications. The most important work during the year has been the completion of

Leon Campbell's volume containing dates of maxima and minima, and mean light curves determined from AAVSO observations. This volume has been subject to many delays. Mr. Campbell began the preparation in the 1930's, but publication was impossible when war broke out. After the war, he decided to revise many details and to bring it more up-to-date, with material available up to 1948. It was a great sorrow for all of us that he did not live to see his great work completed.

Many members have taken part in the preparation of the volume. The major part of the typing was done by Mr. Campbell's daughter, Florence Campbell Bibber. David Rosebrugh plotted the mean light curves from Mr. Campbell's tables of mean values; the present Recorder drew the smoothed curves, and Newton Mayall made the final drawings for publication. Helen Stephansky did some of the final typing and also examined all of the proof sheets from the publishers. A very generous anonymous gift from one of our good members had made publication possible at a reasonable price, in these days of extremely high book costs.

Work is progressing on Quarterly Report No. 18, which will contain 10-day mean values for all AAVSO observations made during the year 1951. All observations were typed on linedex strips from the report sheets. These strips were then sorted and filed in the linedex panels in order of date under each variable. The observations were grouped in 10 day intervals and means were completed. Helen Stephansky has completed the typing of these means for all the variables in the first 18 hours of right ascension. When the typing is completed, the linedex panels will be photographed on microfilm, for convenient storage. They can easily be reproduced any time in the future for anyone who wants to study the individual observations.

Five bulletins were issued during the year: Nos. 6, 7, 9, and 10 containing bi-monthly predictions of approximate brightness of the variables and news notes for the observers, and No. 8 containing the 1955 Annual Predictions of Maxima and Minima of the Long Period Variables. One of the council members mentioned that he thought the bi-monthly predictions and news notes seemed to be an unnecessary expenditure of time and money, so as a test I decided to omit the numbers for July and September. The reaction from the observers shows without doubt that the bulletins have been used and appreciated. Nearly every day brings a request for the missing numbers. The sad result of the test is that the monthly reports contain many more "less-than" observations, for the observers cannot plan their observing programs as efficiently without the predictions.

Variable Star Notes have appeared in each of the six issues of the Journal of the Royal Astronomical Society of Canada during the year. A few reprints of these notes are available for members who desire them. A new membership list was issued in June 1955, and mimeographed copies of the new constitution were sent to all members. Newton Mayall continued his Abstracts of papers presented at the Spring and Fall meetings.

The Mayalls were privileged to revise William Tyler Olcott's "Field Book of the Skies." They made arrangements with the publisher, G.P. Putnam's Sons, to get copies of the book at a discount. The books were sold to members at the regular bookstore price, and all profits and royalties went into the Endowment Fund. Over \$200 was collected in this way. The Amateur Telescope Makers of Boston contributed \$153 to the fund through purchases of the Field Book and additional contributions collected at the same time.

Annual Summary of Observations. During the fiscal year of 1954-55, 144 observers contributed 64,990 observations in 709 reports, an average of 60 reports per month. Twenty-three observers sent in reports each month; 4 sent in 11 reports during the year; 4 sent 10; 6 sent 9; 1 sent 8; 4 sent 7; and 8 sent 6 reports. Ninety-four observers sent in 5 reports or less, with 38 of them sending just one report during the year. Thirty-five observers from 19 countries outside the United States contributed 28% of the total. The other 72% came from 109 observers in 26 states of the U.S.A. Table I lists the country (column 1), number of observers (column 2), and number of observations (column 3).

T A B L E I

Alaska	1	2	Greece	1	2731
Argentina	1	289	Italy	2	1170
Australia	1	121	Jamaica	1	44
Canada	2	141	Japan	3	443
Chile	1	7	Mexico	2	1573
Denmark	1	21	Peru	1	26
Egypt	5	69	South Africa	4	8552
England	1	24	Southern Rhodesia	1	534
France	1	61	Sweden	1	1511
Germany	5	764	United States	109	46907

Table II contains the break-down by states, listed in the same form as Table I. The large number of observations from New York is due to the remarkable work of the Observing Group of the Amateur Astronomers Association, and the Junior Astronomy Club. Nearly 34% of all observations received came from these two groups. It is through their efforts that we are getting good light curves for some of the extremely interesting bright, red, semi-regular and irregular variables.

T A B L E I I

Alabama	1	30	Montana	1	182
California	12	3439	New Jersey	7	1154
Connecticut	3	2224	New Mexico	1	10
Georgia	3	281	New York	25	23863*
Illinois	9	2176	*21,289 from AAA and JAC		
Indiana	2	71	North Carolina	1	5
Iowa	1	4	Ohio	8	3242
Louisiana	1	25	Pennsylvania	1	5
Maine	1	3268	South Carolina	1	35
Maryland	3	128	Texas	3	172
Massachusetts	1	104	Virginia	1	34
Michigan	2	106	Washington	3	69
Minnesota	4	3651	Wisconsin	10	460
Missouri	4	2169	TOTALS:	26	109 46907

More than 30 of our observers have telescopes of 7" or larger. We are holding these people responsible for getting observations at or near minimum light for the fainter variables. During the past year they have cooperated very well. Five observers: Robert Adams, Harry Bull, Claude Carpenter, Thomas Cragg, and Paul Watson have had observations of 14.0 or fainter on each report sent in during the year; and Adams and Cragg sent reports each month. Five more observers, Demetrius Elias, Clinton Ford, C. J. Renner, Michiel Overbeek, and S. C. Venter had observations 14th magnitude or fainter on more than half of their reports. (Clint Ford had one bad month out of his 12, when he did not get below 13.6) Charles Aronowitz, A. R. Ball, Per Darnell,

Edward Halbach, Giovanni Lacchini, Ronald Royer, and Leonard Solomon contributed a few fainter than 14 observations, but not enough to admit them to the "Inner Sanctum." Nineteen other observers have had observations 13.0 or fainter. If this work continues, the bottoms of the light curves will be as well observed as the tops.

In addition to the regular type of observation of the variables, some of the observers are carrying out special programs on the flare stars, by keeping a constant watch for a stated period of time. The rapidly varying star AE Aquarii was watched for 28 minutes by Bull, for 4 hours by Overbeek, and for 1 hour and 28 minutes by Watson. UV Ceti was watched one hour 14 minutes by A.W. Mount, one hour 30 minutes by Overbeek, and one hour by Venter. Darsenius has kept watch on two known flare stars, 9 hours 44 minutes on DO Cephei, and 10 minutes on WX UMA, and 44 minutes on a possible flare star, BD +55°1823. The reports were all negative -- that is, no flares, but the observations are very important statistically.

During the year we had 35 new observers who sent in their first reports; 18 of them have continued to observe, and 11 others who just started in the last few months will probably continue.

The observer with the greatest number of observations this year is Reginald de Kock of South Africa, who has held the record a number of years in the past, with 5,977 observations. In second place is Edward Oravec of New York, with 4,843; third is George Hein of New York with 4,516; fourth is Paul Skaritka of New York with 4,449; fifth is Curtis Anderson of Minnesota with 3,456; Cyrus Fernald of Maine is sixth with 3,268; and Charles Aronowitz of New York is seventh with 3,107. A list of all observers with the number of observations each submitted is given in Table III.

T A B L E I I I

1 R.P. de Kock, South Africa	5,977	26 Allen Montague, Oak Park, Ill.	601
2 Edward Oravec, Tuckahoe, N.Y.	4,843	27 R.H. Bicknell, South Rhodesia	534
3 George Hein, Bronx, New York	4,516	28 Maxwell Kimball, Glen Ridge, N.J.	490
4 Paul Skaritka, Bronx, N.Y.	4,449	29 Patrick Rizzo, Brooklyn, N.Y.	465
5 Curtis Anderson, Minneapolis, Minn	3,456	30 Jerome Wyckoff, Ridgewood, N.J.	361
6 Cyrus Fernald, Wilton, Maine	3,268	31 Harold Kastin, Brooklyn, N.Y.	357
7 Charles Aronowitz, Brooklyn, NY	3,107	32 Mario Ancarani, Faenza, Italy	300
8 Demetrius P. Elias, Greece	2,731	33 Carlos Segers, Buenos Aires, Argentina	289
9 T.A. Cragg, Inglewood, Calif.	2,392	34 Ronald Royer, Pac. Palisades, Cal.	278
10 Robert Adams, Neosho, Missouri	2,063	35 Rudolph Reinhard, Berlin, Germany	272
11 Ferd. Hartmann, St. Albans, N.Y.	1,811	36 Ralph Buckstaff, Oshkosh, Wisconsin	262
12 Leonard Solomon, Brooklyn, NY	1,809	37 Claude Carpenter, Romoland, Calif.	231
13 C.J. Renner, Castalia, Ohio	1,646	38 Hugh Boutell, Santa Barbara, Calif.	216
14 Domingo Taboada, Puebla, Mexico	1,514	39 Akira Ohta, Saitama, Japan	185
15 M.D. Overbeek, Transvaal, So Afr.	1,512	40 Charles McPherson, Edgar, Montana	182
16 Gunnar Darsenius, Goteburg, Swed.	1,511	41 Jurgen Muller, Berlin, Germany	181
17 Leslie Peltier, Delphos, Ohio	1,357	42 William Miller, Glen Rock, N.J.	167
18 Clinton Ford, Suffield, Conn.	1,312	43 John Gaustad, Minneapolis, Minn.	165
19 S.C. Venter, Pretoria, So. Africa	1,014	44 P.O. Parker, Griffin, Georgia	164
20 Philip Goldenblatt, Bronx, NY	974	45 Eckhard Pohl, Heidelberg, Germany	151
21 Stephen Maran, Brooklyn, N.Y.	930	46 A.W. Mount, Fort Worth, Texas	145
22 David Rosebrugh, Meriden, Conn	910	47 Frank Kelly, Binghamton, N.Y.	143
23 Giovanni Lacchini, Fannza, Italy	870	48 Francis Morgan, Verdun, Quebec	138
24 Herbert Beidler, Chicago, Ill.	744	49 Sigeru Kanda, Sizenoka, Japan	135
25 Gerald Schultz, Lincolnwood, Ill.	675	50 George Diedrich, Elyria, Ohio	125

51 Tatsuo Yamada, Zichi, Japan	123	98 Joseph Zelvin, Brooklyn, N.Y.	22
52 Mrs. Rosina Dafter, Queensland, Australia	121	99 Per Darnell, Copenhagen, Denmark	21
53 Donald Charles, Concord, California	113	100 Margaret S. Houston, Manhattan, Kan.	21
54 Christine Culp, Grand Ledge, Michigan	105	101 Walter Barber, Atlanta, Georgia	20
55 Jeremy Knowles, Marblehead, Mass.	104	102 Robert Johnsson, Chicago, Illinois	20
56 Leonard Abbey, Decatur, Georgia	97	103 William Albrecht, Milwaukee, Wisc.	19
57 Artur Jahn, Berlin, Germany	97	104 Robert Deemer, Pasadena, Calif.	18
58 Carl Hein, Bronx, New York	81	105 David Halvorson, Woodbury, N.J.	18
59 Wendell Perry, Massena, N.Y.	75	106 Charles Michael, Bucyrus, Ohio	18
60 Walter Houston, Manhattan, Kansas	74	107 Robert H. Miller, Baltimore, Md.	15
61 Joseph Anderer, Chicago, Illinois	73	108 J. Farrell Walsh, Brooklyn, N.Y.	15
62 Paul Watson, Pasadena, Maryland	71	109 Dan Davis, Jr., Childress, Texas	14
63 Kenneth Weitzenhoffer, New York, N.Y.	70	110 William Gleason, Ellington, Texas	13
64 O.M. Erpenstein, Millbrae, Calif.	68	111 Eugene Lonak, Chicago, Illinois	12
65 A. R. Ball, Milwaukee, Wisconsin	64	112 Donald Zahner, Clayton, Missouri	11
66 Amy Eliasoff, Belle Harbor, N.Y.	64	113 Russell Kofeod, Lincolnwood, Ill.	10
67 F. Lorr, Berlin, Germany	63	114 Charles Ricker, Albuquerque, N.M.	10
68 Edward Halbach, Milwaukee, Wisconsin	63	115 Albert Hinn, Bronx, New York	9
69 Robert Percy, Indianapolis, Indiana	62	116 James G. Peters, New Albany, Ind.	9
70 Rene Ficonetti, Ollioules, France	61	117 Robert Fellenz, Marshfield, Wisc.	8
71 Robert Greenley, Caldwell, N.J.	60	118 Louis Rick, Elyria, Ohio	8
72 Francisco Escalante, Los Pinos, Mexico	59	119 Howard Thomas, Coulee Dam, Wash.	8
73 William Mebius, Verona, New Jersey	57	120 Hector Alvarez, Santiago, Chile	7
74 Jim Breckinridge, Cleveland Hts., Ohio	53	121 R.A. Haberstroh, Milwaukee, Wisc.	7
75 S. Archer, Cape, South Africa	49	122 Stephen Robb, Minneapolis, Minn.	7
76 Gilbert Matthews, New York, N.Y.	48	123 Helene Calamaras, Woodside, N.Y.	6
77 Howard Sturgis, Los Angeles, Calif.	45	124 John Neff, Milwaukee, Wisconsin	6
78 E. C. Melville, Jamaica, B.W.I.	44	125 Edgar Paulton, Brooklyn, N.Y.	6
79 Harry Bull, Baltimore, Maryland	42	126 Donald Rosenfield, Chicago, Ill.	6
80 William Glenn, New York, N.Y.	40	127 Kenneth Walko, Elyria, Ohio	6
81 Allan Stupp, New York, New York	40	128 Leo Kelley, Jackson Hts, New York	5
82 Morgan Thomas, Winslow, Washington	36	129 Julia Perley, Fort Bragg, No. Car.	5
83 James Carlisle, Spartanburg, So. Car.	35	130 John Weaver, Lancaster, Penna.	5
84 Toby Owen, Chicago, Illinois	35	131 Dale Cruikshank, Des Moines, Iowa	4
85 Lancaster Hiett, Arlington, Virginia	34	132 Richard Saffadi, Alexandria, Egypt	4
86 Alfred Behar, Alexandria, Egypt	32	133 William Sullivan, San Francisco, Cal	4
87 Elias Semos, Alexandria, Egypt	31	134 Arthur Dalton, Alberta, Canada	3
88 LaVaughn Hales, Boaz, Alabama	30	135 Alike Herring, South Gate, Calif.	3
89 DeLorne Diedrich, Elyria, Ohio	29	136 Ronald Chiabotta, Kansas City, Mo.	2
90 R. James, Milwaukee, Wisconsin	27	137 L. Clendenning, Milwaukee, Wisc.	2
91 Victor Estremadoyro, Lima, Peru	26	138 William Konig, Milwaukee, Wisc.	2
92 Robert Gemberling, Spokane, Wash.	25	139 Robert Pivonka, Anchorage, Alaska	2
93 R.M. Womelsdorff, Lake Charles, La.	25	140 Anne Silverstein, Brooklyn, N.Y.	2
94 Linda Crouse, New York, N.Y.	24	141 Clarence Lee, West Englewood, NJ	1
95 Patrick Moore, Sussex, England	24	142 Allan Lofberg, Alexandria, Egypt	1
96 Victor Blunck, Minneapolis, Minn.	23	143 Dicran Tutundjian, Alexandria, Egypt	1
97 J.G. Goodsell, South Pasadena, Cal.	23	144 Tom Waskiewicz, Inkster, Michigan	1

This year we had 7 observers with more than 3,000 observations; three between 2000 and 3000; and 9 between 1000 and 2000. These first 19 observers contributed more than 50,000 observations. It is hoped that many of the other observers will be able to make more observations another year, for we need observers scattered all over the world in order to continue our complete coverage of the light curves. It must be emphasized that quantity of observations is not as important as quality. Of course

I do not mean to intimate that the work of our "top" observers is not of the highest quality. But many of our observers with a small number of observations selected their variables carefully and did extremely important work.

Other Activities. The reports of the chairmen of the various divisions will give details of their work. The Solar Division is being reorganized by its new Chairman, Harry L. Bondy. He has great plans for extending the work in the near future. George Diedrich, Chairman of the Nova Search Division, has devised a new way of listing observations by "area-nights," which will simplify the publication of reports.

The Occultation Division is planning to expand its work by observing some occultations with photoelectric photometers. The Photoelectric Photometer committee is preparing mimeographed instructions for the setup of PEP equipment. The Auroral Division has been discontinued, not because the work is less important, but because Dr. Gartlein of Cornell University is now able to handle the reports directly and it is no longer necessary to have an AAVSO division acting as a clearing house for him.

Personnel. The association has been very fortunate in having Miss Helen Stephansky continue her work as AAVSO Assistant. Her news notes have been a very popular addition to our Bulletins, and she has helped the association with her publicity releases. The Recorder is particularly grateful for her able work in taking care of the Headquarters office this summer.

I would like to express my appreciation for all the help and encouragement I have received from all the members and friends of the AAVSO.

Respectfully submitted,

MARGARET W. MAYALL
Recorder and Director, AAVSO