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# AAVSO Newsletter

SINCE 1911...

*The AAVSO is an international non-profit organization of variable star observers whose mission is: to observe and analyze variable stars; to collect and archive observations for worldwide access; and to forge strong collaborations and mentoring between amateurs and professionals that promote both scientific research and education on variable sources.*

## FROM THE DIRECTOR'S DESK

ARNE A. HENDEN (HQA)



It has been a busy quarter, getting prepared for the two big meetings that were held. First, the American Astronomical Society (AAS) held their summer meeting in Boston, and we participated in a big way. We had a booth (nicely placed in front of the plenary talk auditorium) that was staffed by AAVSO professional members/volunteers as well as headquarters staff, who were there 7:30am–6:30pm each day. John Martin and Kristine Larsen in particular spent many hours talking to attendees about the AAVSO and variable stars in general. The booth was a new portable exhibit from Skyline, with three panels of AAVSO information. The staff created a repeating PowerPoint presentation, covering most of the programs of the AAVSO, which we ran on two iPads. Thumbdrives containing our most recent DSLR tutorial manual, as well as copies of our other manuals and reference material, were made available to attendees. The hit of the show, however, were the miniature Tootsie-Rolls! I think the staff did an outstanding job of display design and picking appropriate material for the slides.

At that meeting, the AAVSO also held a Special Session on Long Time-Domain Astronomy, with

talks from many of the experts, such as Brad Schaefer and David Turner. I was also invited to give a plenary talk on “Citizen Science in the Age of Surveys” that was well received. I think the AAVSO was well represented at that meeting, and everyone that we talked to respected the work that the observers were doing.

The next week saw the joint SAS/AAVSO/CBA meeting, with about 170 registered participants. I gave a workshop on photometric transformation, highlighting the excellent programs that Gordon Myers, George Silvis, and Richard Sabo have created to make transformation easier. We'll be releasing them to the community soon. I was also honored in giving the banquet talk, and had a lot of fun mentioning some of the weather-related disasters that I've had in my 40 years as an astronomer. (Luckily it was not recorded...) There were lots of AAVSO papers, and we set up the AAVSO booth again in the exhibitors' area. I like the synergy among the three groups, and the new venue (Ontario Airport Hotel instead of Northwoods Resort) offered more meeting space and informal gathering spots. The bar also stayed open past 9 p.m., and was the focal point for many discussions.

Other recent happenings at headquarters include a new DSLR observing manual, based on the workshop given last year; a visit by Brad Schaefer

## PRESIDENT'S MESSAGE

JENO SOKOLOSKI



by Jeno Sokoloski  
and Kevin Marvel

On June 11, 2014, the Council selected the next Director of the AAVSO. We will announce the name of the new Director in a few months.

The Council's vote on the new Director took one morning. It was, however, the culmination of a year and a half of work by both Council and the Search Committee. In a previous column, I listed the ten basic responsibilities of the governing council of a non-profit organization. One of those responsibilities is to select the chief executive. Although the Council typically only selects a new Director once every decade or several decades, the impact of this decision is felt by the organization every day. So, here I will describe the process that we used to select the individual who will lead the organization after Arne Henden retires in early 2015.

The very first step in the process, taken in January 2013 by then-President Mario Motta, was to appoint Kevin Marvel as chair of the Search

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**DIRECTOR'S MESSAGE  
CONTINUED...**

to work on recurrent novae using the Harvard plate stacks; shipment of BSM Berry to Perth (Greg Bolt); the 25 million observation milestone for the AAVSO International Database that was passed; and the release of new CHOICE courses on VStar and VPHOT.

Oh yes, then there was the two-day Council meeting to select the next Director! I bet that you will hear more about that in the next newsletter. All of the candidates were outstanding, which was one of the best results from the search—the AAVSO is obviously a drawing-card for top-notch talent.

One of the nice things about the AAVSO is its international character. While it may be hot days and short nights up here at headquarters, those living in the southern hemisphere are enjoying the long nights of winter. That is perfect observing weather to catch all of those southern variables! Clear skies, everyone! ★

*Ed. note: the Spanish language version of Arne's message can be found on page 14.*

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**PRESIDENT'S MESSAGE  
CONTINUED...**

Committee. Kevin is a former Council member, former Vice President, and the Executive Director of the AAS. The other members of the Search Committee were: Mario Motta (past President, amateur astronomer), Lee Anne Willson (former President, professional astronomer), Richard Sabo (amateur astronomer), Gary Walker (Secretary, former President, amateur astronomer), Ed Guinan (professional astronomer), Aaron Price (former Assistant Director), and Jen Sokoloski (President, professional astronomer). The Committee's job was to use a fair and rigorous process to find the best possible candidates and rank-order them for Council consideration.

We solicited candidates by posting the job advertisement strategically and by directly encouraging as many promising candidates as possible to apply. Council got the ball rolling in February 2013 by writing a careful description of the job. According to experts on non-profit leadership, a non-profit CEO must: 1) commit to the mission; 2) lead the staff and manage the organization; 3) exercise responsible financial stewardship; 4) lead and manage fund-raising; 5) follow the highest ethical standards, ensure accountability, and comply with the law; 6) engage the board in planning and lead implementation; 7) develop future leadership; 8) build external relationships and serve as an advocate; 9) ensure the quality and effectiveness of programs; and 10) support the board. The Director of the AAVSO must also provide scientific and technical leadership related to astronomical observing and research. In April 2013 the Search Committee began regular telecons, and by mid-2013, the job advertisement and description had been posted on the AAVSO website and in the AAS job register, with an application deadline of September 30, 2013. We received applications from a strong group of candidates with a wide variety of backgrounds.

In the final months of 2013, most of the Search Committee's work focused on establishing robust criteria by which to assess the applicants. The end result was a list of five well-defined categories:

- Management:
  - Internal functions of the organization,
- Leadership:
  - Relations with the AAVSO community,
- Credentials:
  - Ability to represent the AAVSO in the professional community,

<b>DIRECTOR</b>	Arne A. Henden
<b>PRESIDENT</b>	Jennifer Sokoloski
<b>PAST PRESIDENT</b>	Mario Motta
<b>1ST VICE PRESIDENT</b>	Kristine M. Larsen
<b>SECRETARY</b>	Gary Walker
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Roger S. Kolman	Donn Starkey
Chryssa Kouveliotou	David Turner
John Martin	Doug Welch

**NEWSLETTER**

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<b>DEVELOPMENT</b>	Mike Simonsen

The *AAVSO Newsletter* is published in January, April, July, and October. Items of general interest to be considered for the *Newsletter* should be sent to [eowaagen@aavso.org](mailto:eowaagen@aavso.org). Photos in this issue courtesy of R. Berry, J. Breckinridge, H. Strupat.

Membership in the AAVSO is open to anyone who is interested in variable stars and in contributing to the support of valuable research. Members include professional astronomers, amateur astronomers, researchers, educators, students, and those who love variable star astronomy.

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**E/PO:**

Education and public outreach,

**Fund-raising:**

Ability to garner resources beyond dues and meetings, and

**Other:**

A grab-bag of skills and experience not covered elsewhere.

We were aware that in each category, there would be candidates who had experience that would allow us to evaluate them on demonstrated competence. There would be others where we would need to make our best judgment as to whether they had the talent and could develop the skills. In their scoring, each member of the Search Committee was free to weight the different categories as they saw fit.

CONTINUED ON NEXT PAGE

## PRESIDENT'S MESSAGE CONTINUED...

As we worked to finalize these criteria, we also educated ourselves about avoiding conscious and unconscious bias during job searches. Some examples of practices that we used to avoid bias included: defining the assessment criteria before reading the applications, doing a first round of grading individually before discussing the applicants, listing evidence for our scores and referring to this evidence in discussion of our rankings, and adhering strictly to the defined set of criteria. Also important was the clear declaration and discussion of any potential conflicts of interest. We had a round of discussion about conflicts of interest and no substantive conflicts were identified. On January 21, 2014, we submitted a status report to Council describing the above process in detail.

After the first round of scoring and discussion, the Search Committee decided to conduct phone interviews with the top eleven candidates. We undertook a one-hour interview with each candidate, using a standard set of questions, asked in the same way by the same person. A few examples of the questions include:

“What is your vision for what AAVSO will look like, what it will be doing, 5–10 years from now?”

“Looking at your current job [or last job if between positions], how did your work (or leadership) enhance the impact of the organization? We’re most interested in the contrast between what you started with and how you left or might leave the organization after moving to the AAVSO Director position?”

“How would you describe the personal values and philosophy that would guide you as you provide leadership to the AAVSO in this position?”

As not all Search Committee members could participate in each phone call, we used one or two scribes to compile accurate representations of each candidate’s answers, and we distributed these summaries to all members of the committee. The final phone interview was completed on February 13, 2014, after which each committee member re-scored and re-ranked each candidate based on our established criteria. On February 23, 2014, the Search Committee held a phone conference during which we discussed any significant differences in scores and rankings from the different committee members. At this time, the Search Committee also submitted a status report to Council describing the phone interview process in detail, including the full list of questions and the number of candidates interviewed by phone.

After lengthy discussion, the Search Committee decided to include the top six candidates in the next steps of the process by phoning the references provided by these candidates. These six candidates constituted our “short list.” A subcommittee of the Search Committee formulated a set of questions, and Kevin Marvel was tasked with calling two of the references provided by each candidate. Phone calls averaged thirty minutes per reference. Kevin kept copious notes during the process for each candidate and distributed summaries of the phone calls to the entire Search Committee. No member of the Search Committee felt that the phone calls to references changed their ranking of the candidates; in fact, most committee members stated that the phone calls reinforced their rankings. On March 24, 2014, we references. That report included the ranked list of the top eleven candidates, with scores. Council was advised to maintain the strict confidentiality of this document.

After discussing the phone calls to candidates’ references, the Search Committee decided to invite all six of the short-listed candidates to visit AAVSO Headquarters (HQ). On April 9, 10, and 11, 2014, Gary Walker, along with Arne Henden and Kevin Marvel, hosted the six short-listed candidates at HQ. Lee Anne Willson participated by phone for portions of each candidate’s visit. Visits took place in the morning and afternoon, with two candidates visiting each day. Each candidate’s visit followed an identical schedule, with the candidate meeting first with Arne Henden and then getting a tour of the headquarters building. Following the tour were half-hour, one-on-one visits with senior staff (including Elizabeth Waagen, Rebecca Turner, Matthew Templeton, and Mike Simonsen) followed by a one-hour meeting with all AAVSO staff. At the conclusion of this meeting, each candidate had a one-hour meeting with Kevin Marvel, Gary Walker, Arne Henden, and, via FaceTime, Lee Anne Willson. The sessions with staff were recorded for the few staff members who were not present. The staff generally asked identical questions of each candidate, but some variation took place as the conversations varied based on the individual. The AAVSO staff met at the end of each candidate’s visit to discuss the individual and his or her merits, and again after all the visits concluded to rank the candidates. Rebecca Turner was tasked with writing up the consensus view of the staff members, which they provided to Kevin Marvel. The staff report was subsequently distributed to the Search Committee along with links to the recorded sessions. After discussing the visits to

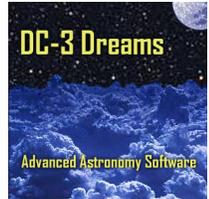
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HQ, the members of the Search Committee re-scored and re-ranked the candidates.

On May 9, 2014, the Search Committee delivered its final report to Council. That report contained a ranked list of the six short-listed candidates, with a description of the strengths and weaknesses of each, along with a recommendation that Council interview the top three candidates. The final report to Council also included the resumes and letters of application, summaries of the phone interviews, summaries of the phone calls with each of the candidates’ references, and summaries of the visits to HQ for each of the six short-listed candidates. The report closed with a reminder to Council that its contents are confidential.

## PRESIDENT'S MESSAGE CONTINUED...

On June 10, 2014, in Ontario, California, the Council interviewed the three finalists for Director. To prepare both Council and the finalists for the interviews, we sent all parties a report from the Transition Committee (described in the April *Newsletter*) entitled "Legacy Issues and Opportunities Facing the AAVSO and Its New Director." The Council met with each candidate twice—once in the morning and once in the afternoon. The morning interviews were very similar for each candidate, with every councilor who had not been a member of the Search Committee having the opportunity to question the candidates on a pre-arranged set of topics. In the afternoon, the Council asked each candidate questions that were specific to that candidate, and gave the candidates the opportunity to question the Council. Three councilors participated in the interviews electronically, and one councilor (who was very familiar with the candidates due to being a member of the Search Committee) was not able to participate due to a scheduling conflict. On June 11, 2014, using several rounds of voting, and taking into account all of the materials from the Search Committee as well as the final interviews, the Council ranked the three finalists. One additional vote confirmed that the top-ranked candidate had the support of more than 75% of Council, as required by the Bylaws for the hire of a new Director. Every member of Council participated in the voting.

We are thrilled to report that we made an offer to one of the candidates, and that that offer has been verbally accepted. We would like to thank the Search Committee for their hard work. We are also grateful to the excellent slate of candidates, who spent their valuable time submitting careful, thoughtful, and at times visionary applications. Many of the applicants are devoted members of the AAVSO community, and they brought a wonderfully diverse set of skills and ideas to the table. With the search process complete, the Council's vote on June 11, 2014, marks the beginning the transition in earnest from the Henden era to that of the next Director. ★

*Ed. note: the Spanish language version of Jenó's message can be found on page 14.*

## UPCOMING MEETINGS

### 103rd Annual Meeting of the AAVSO

Save the date! The AAVSO's next annual meeting will be held on November 7 and 8, 2014, at the Woburn Hilton in metro-Boston. This will be Arne Henden's last meeting as Director of the AAVSO. (He will be retiring in early 2015.) This will not only be a farewell meeting, but also a celebration of Arne's long and accomplished career. We hope that many of you will attend and help make Arne's last meeting as Director a very special one. Stay tuned to the AAVSO web site for schedule and registration details as they are available.

### Third Annual AAVSO CCD School

There are still a few spaces available in the AAVSO's 2014 CCD School. The school will be taught by AAVSO Director Arne Henden and will run August 4–8, 2014. All classes will take place at AAVSO Headquarters in Cambridge, MA. Arne will be retiring in early 2015, so this may be your last chance to take this in-depth course.

The CCD school is designed for those who have some experience with a CCD system, and who want to learn how to take professional-quality data. The classes will cover topics such as: calibration of the equipment, observing guidelines, photometric and image processing techniques, transformation of data, statistics, and basic data-mining concepts. Projects will be assigned using AAVSONet data. Laptops are not needed for participation, but can be useful in following the classroom examples. Bring any questions and imaging problems that you might have—this is the perfect venue to get help!

The registration fee includes a textbook, M–F daily classes, daily breaks, and lunches. The cost is \$500 for members and \$585 for non-members (includes membership). Registrations will be accepted on a first-come, first-served basis.

For more information on accommodations or to register please visit: <http://www.aavso.org/third-annual-aavso-ccd-school> ★

## DATA DIGITIZATION

We occasionally receive batches of archival data, digitized from literature sources by volunteers who want these data to be available via the AAVSO International Database. One of our top volunteers has been AAVSO Councilor Kevin Paxson (PKV), who as of July 1 had sent over 100,000 digitized observations to AAVSO headquarters. He is the first of our digitizers to reach that very high mark, and it may be hard to beat! Thanks and Congratulations to Kevin for his efforts in making archival data available to the community in digital form!

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7	2410000	2419880.0000	VAJ	V	X GEM	0	12.91	na	na	na	na	1936IO.....1	otometry. PKV
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13	2420000	2420147.0000	VAJ	V	X GEM	0	13.34	na	na	na	na	1936IO.....1	otometry. PKV
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18	2420000	2420245.0000	VAJ	V	X GEM	0	8.60	na	na	na	na	1936IO.....1	photometry. PKV
19	2420000	2420251.0000	VAJ	V	X GEM	0	8.60	na	na	na	na	1936IO.....1	photometry. PKV
20	2420000	2420406.0000	VAJ	V	X GEM	0	13.33	na	na	na	na	1936IO.....19. 41V	Obs. on p. 41. Harvard photometry. PKV
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23	2420000	2420458.0000	VAJ	V	X GEM	0	10.51	na	na	na	na	1936IO.....19. 41V	Obs. on p. 41. Harvard photometry. PKV
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25	2420000	2420497.0000	VAJ	V	X GEM	0	9.41	na	na	na	na	1936IO.....19. 41V	Obs. on p. 41. Harvard photometry. PKV
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33	2420000	2420620.0000	VAJ	V	X GEM	0	12.26	na	na	na	na	1936IO.....19. 41V	Obs. on p. 42. Harvard photometry. PKV
34	2420000	2420747.0000	VAJ	V	X GEM	0	10.84	na	na	na	na	1936IO.....19. 41V	Obs. on p. 42. Harvard photometry. PKV
35	2420000	2420760.0000	VAJ	V	X GEM	0	9.82	na	na	na	na	1936IO.....19. 41V	Obs. on p. 42. Harvard photometry. PKV
36	2420000	2420782.0000	VAJ	V	X GEM	0	9.98	na	na	na	na	1936IO.....19. 41V	Obs. on p. 42. Harvard photometry. PKV

Kevin Paxson (inset) and a portion of one of his archival data-entry spreadsheets

## THERE WHEN YOU NEED THEM

As most readers of this newsletter know by now, the AAVSO's computer system server had been breached during the week of the AAS-AAVSO meeting held earlier this month. It was a serious breach which threatened to compromise many systems operations. Fortunately for the AAVSO, our system administrator is Richard "Doc" Kinne, and our webmaster is Will McCain. Two of the best.

At the first indications that something might be wrong, Doc, who was attending the AAS meeting, went to work immediately, logging-in remotely to evaluate the extent of the trouble and to temporarily disable all access to the server. He then notified Will, and the two set up a "war room" in the AAVSO library at Headquarters.

Over the next week the two worked together intensively to determine the extent of the trouble, and to prioritize how the many functions and applications would be brought back up to normal operations. During that first week of troubleshooting, the two worked late into the night, every night.

By the second week, the two had stabilized the problem, and spent most of their time tying-up loose ends, mostly having to do with re-establishing accessibility under the changed configurations. They didn't have to work late anymore!

While they were wrestling with the system problems, Doc and Will also took time whenever necessary to help staff get back on line on a limited basis, so that our routine office operations were hardly interrupted at all.



The brains behind the AAVSO's electronic brain: webmaster Will McCain (left), and system administrator Doc Kinne, at work in the "war room" they had set up in the AAVSO library at Headquarters.

Things are back to normal, for the most part—except for a handful of nagging minor issues that will be resolved sooner or later.

Thanks Doc, and thanks Will! ★

### AAVSO CENTENNIAL HISTORY !

*Advancing Variable Star Astronomy: The Centennial History of The American Association of Variable Star Observers* by Thomas R. Williams and Michael Saladyga, published by Cambridge University Press, is available through the AAVSO at a special reduced price.

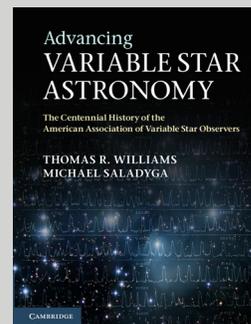
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## 50-YEAR MAN, AND THEN SOME

We had the pleasure of meeting long-time AAVSO member Jim Breckinridge (BKJ) of Pasadena, California, at the AAS meeting in Boston this month.

Jim is not often able to attend an AAVSO meeting, so we were especially happy to see him, and were delighted to learn that this is his sixtieth year as an AAVSO member!

Jim first wrote to the AAVSO in June of 1954, and asked to become a member the following January. He was only 15 years of age at that time, and Director Margaret Mayall regretted to inform him that the lower age limit for membership was 16 years. She advised him to keep sending observations until his 16th birthday, and then, when he applied for membership, the council was sure to approve his application.

When Jim sent his application, and a check for \$3.00, Mayall noticed there was an error in the amount. As it happened, Jim reported, his mother had “made a mistake in writing it, and I filled in the rest as a family gag, never expecting it to get out of the house. I do, however, wish I had a million dollars and could give the same to the A.A.V.S.O.”

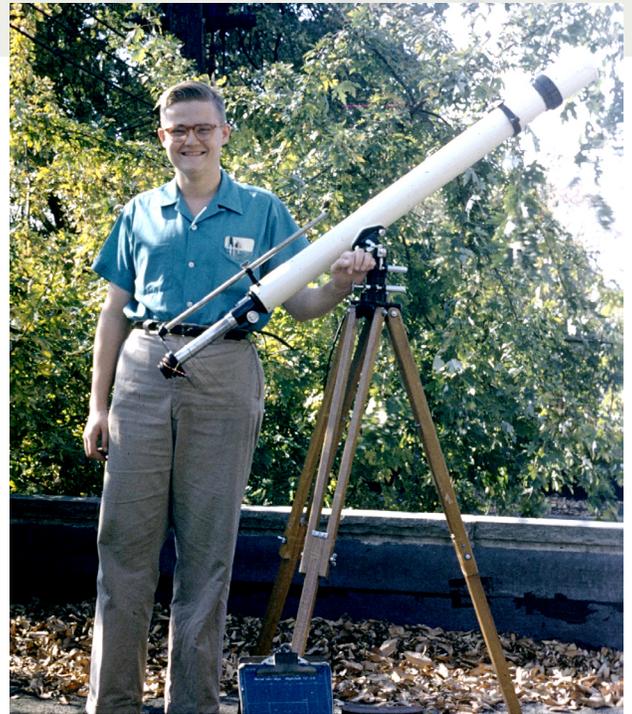
When Mayall wrote back to return the check, she said, “Our Endowment Fund would really have gone over the top with it, and you would have been the most popular man in the AAVSO!”

Mayall invited him to attend the meeting held in Pittsburgh that spring, which he did. Jim appears in a photo with several AAVSOers visiting the J. W. Fecker Plant in Pittsburgh to examine the latest in photoelectric photometry equipment (the photo appears in the AAVSO centennial history book on page 202).

Jim turned up at the AAS meeting at a good time, for the AAVSO had just minted a new 50-year award pin for deserving members such as he. Jim thankfully received his pin and proudly displayed it pinned to his identification badge during the rest of the meeting.

In June 2014, Jim wrote: “I want to thank the AAVSO for giving me a lifelong opportunity to peruse a career in science. As a young teenager with a passion for science and technology I joined the AAVSO a few weeks before my 16th birthday (the minimum age). And today, after 60 years as a member of the AAVSO, I still continue in a career of building astronomical telescopes and instruments for scientific research. I will be starting my variable star observing again soon, now that I have partially retired.”

And what a career Jim has had!! He has become a leader in the field of space optics, spectroscopy, and interferometry, and has had an extremely distinguished career at the NASA Jet Propulsion Laboratory, National Science Foundation, National Radio Astronomy Observatory, Kitt Peak National Observatory, California Institute of Technology, Lick Observatory, and in private industry. He has served in diverse leadership roles including technologist, program director, project manager, professor (space optics), and consultant.



50-year AAVSO member Jim Breckinridge. The photo was part of a Sky & Telescope advertising campaign for Unitron telescopes in the 1950s.

Here are just three examples of the contributions he has made over the years:

—Jim was the technical advisor to the chairman of the Hubble Space Telescope NASA failure review board, and he led the section responsible for the repair of the optical system on the HST (modification of the optics in the Wide-Field Planetary camera).

—As line technical manager of the JPL optical sciences and applications section, Jim led the creation of the capability there for optical system design, engineering, and delivery of space flight hardware to support the NASA science and engineering communities. Imaging spectrometers, cameras, and interferometers were the hardware products of the Section; they delivered the optical systems for Cassini, Galileo, and the ATMOS (shuttle-based) missions.

—As Chief Technologist for the NASA Navigator Program, Jim was responsible for advanced technology for the detection and characterization of exo-planetary systems using space telescopes: large mirror space telescopes, interferometers, innovative optical systems, coronagraphs, and imaging spectrometers.

Some of our observers probably have in their libraries his book, *Basic Optics for the Astronomical Sciences*.

In his 60th year of AAVSO membership, we were delighted to present Jim with his 50-year pin and thank him for his faithful support of the AAVSO. We take this opportunity to thank him also for his faithful service to astronomy and to the advance of knowledge. ★

## THE FIRST AAVSO ANNUAL CAMPAIGN

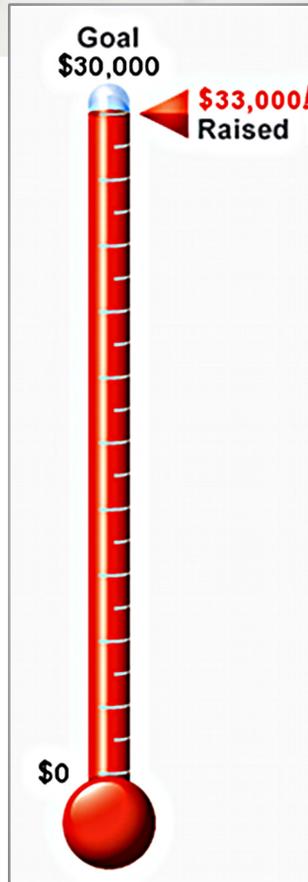
**MIKE SIMONSEN (SXN), AAVSO HQ,  
MEMBERSHIP DIRECTOR/DEVELOPMENT OFFICER**

The last day of the first AAVSO Annual Campaign has come and I am happy to announce we exceeded our goal of raising \$30,000 this year. The unofficial tally as of June 30, 2014, is \$33,029.05. It's been an interesting and rewarding experience for me, and I think we learned some things that will help us have even more success in the future.

We started planning for this in the fall of 2013. In April I began calling past donors to prime the campaign pump with pre-launch donations and pledges. By the time we officially launched the campaign on May 1, 2014, we already had over \$10,000 in pledges and donations.

The theme of this year's campaign was support for the tools and services the AAVSO provides that we've all come to know by their acronyms—AID, VSP, LCG, CHOICE, VSD, VSX, VSTAR, etc., etc. We ran a daily highlight in the News Feed featuring one of these Acronyms of the Day for the first three weeks of the campaign. These short pieces were also shared through our Facebook and Twitter feeds.

Donations came in steadily until the second week of June, when we hit a lull in the action and for several days the AAVSO website was offline. I admit for just a minute I thought, "This could work in our favor! Once people realize how much they depend on these tools and services and suddenly they cannot access them, they might be inclined to agree that they are worth supporting with a donation."



As it turns out, that wasn't necessary. Our members and observers already know how valuable the services we provide are and were glad to help us reach our goal, with a little friendly persuasion and prodding. One thing that is painfully obvious is that people won't give if you don't ask. You can't just build a webpage, or send out some emails and expect the cash to flow in. You have to work at it. You need to talk to people on the phone and in person, and devote a lot of time to building and maintaining relationships with your donors and supporters.

Another thing that is clear from this experience is that one person cannot do this alone. I want to thank the entire staff and all the members of the Council who worked on this campaign on behalf of the AAVSO. And we all wish to express our heartfelt thanks to those donors who helped make our first annual campaign a success.

In the spirit of our friends around the world who are enjoying the World Cup I just want to say,

”GOOOOOOOOOOOOOOOOOOOOOOOOOAL!” ★



## AAVSO AT THE AAS

**JOHN C. MARTIN (UIS01) UNIVERSITY OF ILLINOIS AT SPRINGFIELD**

The 224th meeting of the American Astronomical Society (AAS) was held in Boston the first week in June 2014. This is the biannual meeting for professional astronomers in North America. Over the past few years the AAS has done more to attract non-professionals, including a reduced rate one-day registration for amateurs that includes special talks and an evening outdoor star party open to the public (which was held on the Boston Common at this meeting). Because this summer meeting was close to AAVSO Headquarters, the AAVSO registered as an exhibitor and set up a booth.

This meeting was the inaugural outing for our new traveling exhibit designed by Rebecca Turner. The AAVSO was assigned a prime space just outside the ballroom that hosted the plenary lectures. Visitors to the booth met AAVSO staff and council members who took shifts answering questions and giving out Tootsie Rolls and thumb drives. The thumb drives contained useful materials produced by the AAVSO, including the new DSLR observing manual as well as the Visual and CCD observing manuals and the latest issues of the *Annual Report*, *JAAVSO*, and the *Newsletter*. The Tootsie Rolls were a big hit and a good conversation starter. The booth also featured iPads that continuously displayed a slideshow (a collaborative effort by the HQ staff) advertising the AAVSO, with sections on over a dozen areas of AAVSO services and resources.

The scientific program on the first day of the meeting featured a special break-out oral session organized by AAVSO Headquarters on long time domain astronomy. AAVSO Scientific Director Matthew Templeton chaired the session which included talks on visual light curves of CVs (Brad Schafer, Louisiana State University), light echoes from bright transient events (Doug Welch, McMaster University), the importance of long term visual light curves of Cepheids and M-type supergiants (David Turner, St. Mary's University), R Coronae Borealis (Geoff Clayton, Louisiana State University), the Harvard Digital Access to a Sky Century plate scanning project (George Miller, Harvard-Smithsonian Center for Astrophysics), and an overview of AAVSO contributions to long time domain astronomy (Arne Henden, AAVSO).

Mid-morning the second day of the meeting, AAVSO Director Arne Henden gave an invited plenary address on Citizen Science in the Age



AAVSO Staff member Rebecca Turner (left) and AAVSO Council member Kristine Larsen stood ready to answer questions at the AAS meeting

of Surveys. He shared entertaining anecdotes from his career to illustrate the importance of the non-professional contribution to astronomy, and demonstrated the relevance of citizen science and how it will continue in the era of big data and large surveys. Arne's talk was very well received and widely complimented by those in attendance.

Back at the AAVSO exhibit booth, we were happy to make many new acquaintances as well as visit with several long-time supporters including Martina Arndt, Jim Breckinridge, Pamela Gay, Anna Hillier, Margarita Karovska, Steve Levine, Kevin Marvel, John O'Neill, Brad Schaefer, George Sjöberg, Stephanie Slater, Tim Slater, Paula Szody, Lee Anne Willson, and Bob Wing. Our booth's proximity to the room

where the special sessions were held for the AAS Solar Division gave us an unexpected opportunity to talk to solar astronomers about the AAVSO's contribution to solar physics. We also introduced many graduate students and early career professionals to the connections and services the AAVSO offers.

Thanks to everyone who helped run the exhibit, including Sara Beck, Doc Kinne, Will McMMain, Matthew Templeton, Rebecca Turner, and Elizabeth Waagen and AAVSO Councilors Kristine Larsen, John Martin, Ed Guinan, Doug Welch, Mario Motta, David Turner, and Chryssa Kouveliotou. ★



A view of the the AAVSO's new display panels

## AAVSO/CBA/SAS COMBINED MEETING IN ONTARIO, CALIFORNIA

**LEW COOK (COO), CONCORD, CALIFORNIA AND  
ROBERT BUCHHEIM (BHU), COTO DE CAZA,  
CALIFORNIA**

On June 12–14, 2014, the Society for Astronomical Sciences (SAS) hosted a meeting combined with the AAVSO and the Center for Backyard Astrophysics (CBA). Although the SAS meeting usually occurs earlier in the spring at Big Bear, California (so that the attendees could also attend the Riverside Telescope Makers Conference which takes place up the mountain in late May), this year they departed from their usual time and place so that this larger group could meet. SAS began as the Western Wing of the International Amateur-Professional Photoelectric Photometry (IAPPP) Symposium. IAPPP was founded by Douglas S. Hall at Vanderbilt University.

The SAS meeting had been combined with AAVSO and informally with CBA in different years, but this was the first time all three groups would formally gather together at the same event. Naturally, there had been considerable overlap of the attendees from AAVSO and CBA at all the meetings. I am a member of all three groups, as are many others. This year the co-sponsorship of all three was a great idea. What a fantastic and wonderful meeting it turned out to be!

There were valuable workshops that covered several topics. In “Supernovae Discovery and Science,” we learned about current techniques used to discover supernovae and measure their light curves. This gave us an insight into what may go on in the brains of famous supernova discoverers such as Robert Evans, but this topic was explained using computer skills and techniques



*Josch Hamsch at his laptop shows Bill Stein how he directs each night's observing program for his remote telescope in Chile. He has used it to gather over 1,000,000 CCD observations for the AAVSO in three years! His explanation of this process during the paper sessions showed the audience how prolific an observer can be using a remotely operated telescope. Photo courtesy of Richard Berry.*

for those of us who cannot recall the details of starfields around hundreds of galaxies. Those techniques can detect supernovae down to 21st magnitude. Wow!

We learned also about how CCD cameras are calibrated to get an understanding of how the spectra of stars can be quantified. There was a solid workshop on improving CCD accuracy and precision by Robert Buchheim, and the final polish to the workshops was given by AAVSO Director Arne Henden. He explained how we can determine and use transformation coefficients so our CCD data can be accurately used by others. Thursday was capped off with the AAVSO membership meeting. AAVSO Observer Awards were given out, including to member Josch Hamsch for contributing over one million CCD observations!

Then, the scientific paper sessions began. They all were excellent. Topics ranged from the “Recovery from the Classical-Nova Disaster” by CBA co-founder Joe Patterson to “Radar Observations of Near-Earth Asteroids” by Lance Benner. Mike Simonsen talked about “The Z CamPaign—Year Five”—a topic dear to his heart. Geoff Clayton asked (and answered) “How Many R CrB Stars Are There, Really?”



*123 of the Symposium's over 170 attendees are shown in this group photo by Bob Stevens.*

CONTINUED ON NEXT PAGE

# NEWS AND ANNOUNCEMENTS

## COMBINED MEETING CONTINUED...

Reports continued into unexpected territory. Two such projects were described at the Symposium: supernova light echoes, and gamma-ray bursts. Doug Welch demonstrated that there are probably quite a few still-undiscovered supernova light echoes in the Milky Way, and that they can be found with diligent searches using small telescopes. Once found, they provide an opportunity to make detailed measurements on long-deceased supernovae. For example, Welch showed the spectrum of Tycho's supernova (1572), measured from its light echo. Arto Oksanen has succeeded in discovering—and gathering photometry on—the optical glows from gamma-ray bursts. It is a very challenging project to observe very faint transient objects whose visible lifetime ranges from a few hours to a few days.



*Photometry software creators listen attentively. Pierre de Ponthiere wrote LesvePhotometry, and Richard Berry is the author of many books, including The Handbook of Astronomical Image Processing which includes AIP4WIN. Photo by Hans Strupat.*

David Boyd presented a unique paper analyzing the CBA data (over 75,000 CCD observations over 15 years) on V1432 Aql. V1432 Aql is an AM Herculis-type cataclysmic binary in which the magnetic field of the white dwarf star causes the gas streaming from the secondary star to follow along magnetic lines of force onto the magnetic pole of the white dwarf. To complicate matters, this star system is a partially-eclipsing binary AND the white dwarf rotates with a slightly slower period than the revolutionary period of the system.

There were so many excellent reports of studies and techniques given that everyone has memories they will retain for the rest of their lives. If you weren't fortunate enough to attend the 2014 Symposium, some of the features of the Symposium are available to you. The Proceedings document will soon be available on the SAS website (<http://www.socastrosci.org/home.html>) and videos of most of the technical presentations will also be available for viewing, with links on the SAS website 'Publications' tab. As in past years, both the Proceedings and the videos are made freely available as a service to the research community. For more photos of the symposium see <http://photos.hansstrupat.com/SAS2014/>



*A few of the speakers: L to R, T to B: Bob Buchheim, David Boyd, Lance Benner, Wayne Green, Arne Henden, John Martin, Joe Patterson (CBA Director), Arto Oksanen, and Gary Walker. Photo by Richard Berry.*

This enthralling meeting, as one would anticipate, ended with a banquet. The speaker, our own Director Arne Henden, spoke about how his interests and career in astronomy developed and progressed. Surprisingly, he did little research before the age of ten, so he must have doubled up on his efforts to make up for that slack period! He has had a thoroughly fascinating and dedicated career and life, enriched by his lovely wife, Linda. We will be sad to see him retire at the end of January, but we know he will always remain dear to all AAVSO members, observers, and friends after he retires. He received a sustained standing ovation, as he should have.

What are his plans for retirement? We have heard he has plans of staying in New England, using a big telescope, and continuing contributing to the science of astronomy. Bravo, Arne! ★



*AAVSO staff members Rebecca Turner and Mike Simonsen happily discuss the Symposium. Photo by Richard Berry.*

## IN MEMORIAM

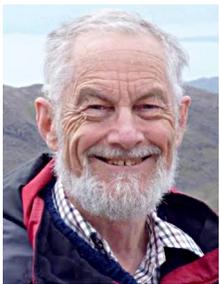
MEMBERS, OBSERVERS, COLLEAGUES,  
AND FRIENDS OF THE AAVSO



*William Bradford*

**WILLIAM A. BRADFIELD** (Yankalilla, South Australia) died June 9, 2014, at the age of 86. Not a variable star observer, Bradfield was the most prolific comet hunter known, credited with the solo visual discovery of 18 comets between 1972

and 2004. He used an antique small telescope (6") and binoculars (as small as 7×35) to make his discoveries. A native of New Zealand, Bradfield's career was as a research scientist on rocket-propulsion systems for the Australian government. Interested in astronomy since a child, he participated in the Moonwatch project in 1957. His focus on comets came after seeing the Great Southern Comet of 1947 and then in 1965 Comet Ikeya-Seki (at magnitude -10 the brightest comet of the 20th century). He began searching for comets after seeing the spectacular Comet Bennett 1970 and realizing he, too, might be able to discover a comet. Bradfield was the recipient of many honors, including the Berenice Page Medal of the Astronomical Society of South Australia in 1981 for his contribution to the discovery and understanding of comets; being made a Member of the Order of Australia in 1989 for his services to science; the Edgar Wilson Award in 2004 for his discovery of C/2004 F4 (Bradfield). Also, minor planet (3430) Bradfield was named in his honor. Our sincere sympathy goes to his wife, Eileen, their children and families, and colleagues and friends.

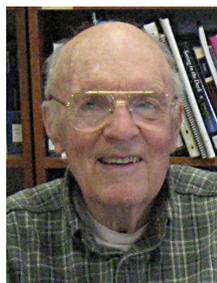


*Thomas Lloyd Evans*

**THOMAS H. H. LLOYD EVANS** (LTE, St. Andrews, Scotland), AAVSO member since 2005, died suddenly on June 12, 2014, at the age of 73. As an observer, Tom contributed 14,968 variable star observations to the AAVSO International Database from May 1994 through April 2014.

A native of Scotland, Tom was interested in astronomy from boyhood and was a member of the Dundee Astronomical Society, where his interests included variables, Mars, and meteors, including

photographing meteor spectra. Much of Tom's career as a professional astronomer was spent at the South African Astronomical Observatory, where he specialized in Miras, carbon and RCB stars, and other post-AGB stars. After retirement he returned to Scotland and built an observatory, continuing his observation of variables as an amateur astronomer until his death. He continued his professional involvement as an Honorary Lecturer at St. Andrews University. Tom was a member of the International Astronomical Union and its Divisions G on Stars and Stellar Physics, H on Interstellar Matter and the Local Universe, H in Commission 37 on Star Clusters and Associations, and G in Commission 45 on Stellar Classification. He was a member of the British Astronomical Association since 1956 and was an Honorary BAA member, and regularly reported his observations there as well as to the AAVSO. Tom was also a member of the Astronomical Society of Southern Africa, serving as President in 1991–1992, and an Honorary member since 2001. Both as a professional and as an amateur astronomer, Tom said how much he appreciated the AAVSO and the valuable work of its observers, and he contributed financially as well as astronomically to the work of the Association. Our sincere condolences go to Tom's wife, Marlene, their families, and Tom's many friends and colleagues.



*Arthur Ritchie*

### ARTHUR D. RITCHIE

(Auburn, Massachusetts), AAVSO Headquarters volunteer, died January 5, 2014. As our longtime HQ volunteer from 1999 to 2013, Arthur was willing to help with any project large or small. He always brightened our day with his cheery

good nature, great smile, and interested and interesting conversation. Arthur and his wonderful wife, Dorothy, were frequent attendees at HQ celebrations and always made the party brighter. Arthur came to the AAVSO by way of our late member and Solar Chair Carl Feehrer—they were longtime friends and fellow solar observers (Arthur was an avid amateur astronomer and particularly loved sunspot observing). He was also an outdoorsman who loved hiking, camping, skiing, sailing, and, in his retirement after a career as a

structural engineer, visiting national parks. At the 2009 annual meeting we were proud to recognize Arthur with an award of special appreciation for his 10 years of volunteer service to the AAVSO. Arthur was a true gentleman and a good friend. We extend heartfelt condolences to Dot, their children and their families, and to his many friends.



*Stanislav Stefl*

### STANISLAV STEFL

(Santiago, Chile) died June 11, 2014, at the age of 58 in an automobile accident in Santiago. He was an Operations Astronomer at the ALMA (Atacama Large Millimeter/Submillimeter Array) Observatory, where he

had spent the last two years becoming expert in observation planning, ensuring the quality of observations as well as the integration of antennas into the array, and was about to return to his native Czech Republic to direct the ALMA Regional Center node in Ondřejov. His research interests included Be stars; his colleagues described him as dedicated, committed, professional, and consistently positive. His collaborative colleagues in several projects included amateur astronomers such as Sebastian Otero. We extend our deepest sympathy to his wife and children, family, and colleagues and friends.

## SCIENCE SUMMARY: AAVSO IN PRINT

ELIZABETH O. WAAGEN (WEO), AAVSO SENIOR TECHNICAL ASSISTANT

**AAVSO** data are constantly being used by researchers around the world in presentations and publications. Below is a listing of some of the publications that appeared 2014 April 1 through June 26 on the arXiv.org preprint server and used AAVSO data or resources and/or acknowledged the AAVSO. To access these articles, type the preprint number into the “Search or Article-id” box at <http://www.arXiv.org>

Sebastián Otero, Stefan Huemmerich, Klaus Bernhard, and Igor Soszyński, “New R Coronae Borealis and DY Persei Star Candidates and Other Related Objects Found in Photometric Surveys”, (arXiv:1406.6676)[Jun 25, 2014]

Taichi Kato, Pavol A. Dubovsky, Igor Kudzej et al., “Survey of Period Variations of Superhumps in SU UMa-Type Dwarf Novae. VI: The Sixth Year (2013-2014)”, (arXiv:1406.6428)[Jun 25, 2014]

A. Santerne, G. Hébrard, M. Deleuil et al., “SOPHIE velocimetry of Kepler transit candidates XII. KOI-1257 b: a highly-eccentric 3-month period transiting exoplanet”, (arXiv:1406.6172)[Jun 24, 2014]

J.M. Benkő, E. Plachy, R. Szabó et al., “Long time-scale behavior of the Blazhko effect from rectified Kepler data”, (arXiv:1406.5864)[Jun 23, 2014]

Ladislav Hric, Rudolf Galis, Laurits Leedjarv et al., “Outburst activity of symbiotic system AG Dra”, (arXiv:1406.5505)[Jun 20, 2014]

M. Netopil, L. Fossati, E. Paunzen et al., “A probable pre-main sequence chemically peculiar star in the open cluster Stock 16”, (arXiv:1406.5304)[Jun 20, 2014]

Geert Barentsen, H. J. Farnhill, J. E. Drew et al., “The Second Data Release of the INT Photometric H $\alpha$  Survey of the Northern Galactic Plane (IPHAS DR2)”, (arXiv:1406.4862)[Jun 18, 2014]

D. J. A. Brown, “Discrepancies between isochrone fitting and gyrochronology for exoplanet host stars?”, (arXiv:1406.4402)[Jun 17, 2014]

L. Szabados, B. Cseh, J. Kovács et al., “Discovery of the spectroscopic binary nature of the classical Cepheids FN Aql and V1344 Aql”, (arXiv:1406.3971)[Jun 16, 2014]

Robert D. Mathieu, Aaron M. Geller, “The Blue Stragglers of the Old Open Cluster NGC 188”, (arXiv:1406.3467)[Jun 13, 2014]

M. Damasso, A. Bernagozzi, E. Bertolini et al., “New Variable Stars Discovered by the APACHE Survey. I. Results After the First Observing Season”, (arXiv:1406.3260)[Jun 12, 2014]

M. M. Elkhateeb and M. I. Nouh, “A Holistic Study of the W UMa Binary EQ Tau”, (arXiv:1406.1661)[Jun 6, 2014]

M. M. Elkhateeb and M. I. Nouh, “An Extensive Photometric Investigation of the W UMa System DK Cyg”, (arXiv:1406.1652)[Jun 6, 2014]

G. Baume, M. J. Rodríguez, M. A. Corti et al., “A deep and wide-field view at the IC 2944 / 2948 complex in Centaurus”, (arXiv:1406.0708)[Jun 3, 2014]

László Molnár, László Szabados, “V473 Lyrae, a unique second-overtone Cepheid with two modulation cycles”, (arXiv:1406.0494)[Jun 2, 2014]

Miaomiao Zhang, Hongchi Wang, and Thomas Henning, “Herbig-Haro objects and mid-infrared outflows in the Vela C molecular cloud”, (arXiv:1405.7782)[May 30, 2014]

Jeremy Shears, “David Elijah Packer: cluster variables, meteors and the solar corona”, (arXiv:1405.7725)[May 29, 2014]

Jeremy Shears, “The controversial pen of Edwin Holmes”, (arXiv:1405.7723)[May 29, 2014]

John R. Percy and Jeong Yeon Yook, “Does the Period of a Pulsating Star Depend on its Amplitude?”, (arXiv:1405.7560)[May 29, 2014]

Barnaby Norris, Peter Tuthill, Nemanja Jovanovic et al., “The VAMPIRES instrument: Imaging the innermost regions of protoplanetary disks with polarimetric interferometry”, (arXiv:1405.7426)[May 29, 2014]

John R. Percy and Rufina Y.-H. Kim, “Amplitude Variations in Pulsating Yellow Supergiants”, (arXiv:1405.6993)[May 27, 2014]

Michael W. Richmond, “BVRI Photometry of SN 2013ej in M74”, (arXiv:1405.7900)[May 20, 2014]

R. Angeloni, R. Contreras Ramos, M. Catelan et al., “The VVV Templates Project. Towards an Automated Classification of VVV Light-Curves. I. Building a database of stellar variability in the near-infrared”, (arXiv:1405.4517)[May 18, 2014]

Geza Kovacs, Joel D. Hartman, Gaspar A. Bakos et al., “Stellar rotational periods in the planet hosting open cluster Praesepe”, (arXiv:1405.3728)[May 15, 2014]

T. L. Campante, “Asteroseismology: Data Analysis Methods and Interpretation for Space and Ground-based Facilities”, (arXiv:1405.3145)[May 13, 2014]

Y. C. Guo, S. M. Hu, C. Xu et al., “Long-term optical and radio variability of BL Lacertae”, (arXiv:1405.2613)[May 12, 2014]

Lynn Cominsky, Kevin McLin, Aurore Simonnet and the Swift E/PO Team, “Fourteen Years of Education and Public Outreach for the Swift Gamma-ray Burst Explorer Mission”, (arXiv:1405.2104)[May 8, 2014]

M. Hillen, J. Menu, H. Van Winckel et al., “An interferometric study of the post-AGB binary 89 Herculis. II Radiative transfer models of the circumbinary disk”, (arXiv:1405.1960)[May 8, 2014]

CONTINUED ON NEXT PAGE

## AAVSO IN PRINT CONTINUED...

Thomas W.-S. Holoien, J. L. Prieto, D. Bersier et al., “ASASSN-14ae: A Tidal Disruption Event at 200 Mpc”, (arXiv:1405.1417)[May 6, 2014]

Ashley Pagnotta and Bradley E. Schaefer, “Identifying and Quantifying Recurrent Novae Masquerading as Classical Novae”, (arXiv:1405.0246)[May 1, 2014]

Brajesh Kumar, S. B. Pandey, C. Eswaraiyah et al., “Broad band polarimetric follow-up of Type IIP SN 2012aw”, (arXiv:1404.6060)[Apr 24, 2014]

J.-F. Desmurs, V. Bujarrabal, M. Lindqvist et al., “SiO masers from AGB stars in the vibrationally excited  $v=1, v=2$ , and  $v=3$  states”, (arXiv:1404.4182)[Apr 16, 2014]

A.J. Drake, B.T. Gaensicke, S.G. Djorgovski et al., “Cataclysmic Variables from the Catalina Real-time Transient Survey”, (arXiv:1404.3732)[Apr 14, 2014]

Laura Chomiuk, Thomas Nelson, Koji Mukai et al., “The 2011 Outburst of Recurrent Nova T Pyx: X-ray Observations Expose the White Dwarf Mass and Ejection Dynamics”, (arXiv:1404.3210)[Apr 11, 2014]

Pierre Kervella, Miguel Montargès, Stephen T. Ridgway et al., “An edge-on translucent dust disk around the nearest AGB star L2 Puppis - VLT/NACO spectro-imaging from 1.04 to 4.05 microns and VLTI interferometry”, (arXiv:1404.3189)[Apr 11, 2014]

Albert Bruch, “Long-term photometry of the eclipsing dwarf nova V893 Scorpii: Orbital period, oscillations, and a possible giant planet”, (arXiv:1404.2902)[Apr 10, 2014]

Detlev Koester, Boris T. Gänsicke, Jay Farihi, “The frequency of planetary debris around young white dwarfs”, (arXiv:1404.2617)[Apr 9, 2014]

We thank the above researchers for including the AAVSO and its resources in their work, and for acknowledging the AAVSO in their publication. We urge all those writing for publication to include the word “AAVSO” in their list of keywords. ★

## TALKING ABOUT THE AAVSO

### ELIZABETH O. WAAGEN (WEO), AAVSO HQ

**Events**—AAVSO members, observers, and friends have given or will be giving presentations about the AAVSO and variable stars at the following venues:

*May 10, 2014*—**Roger Kolman** (KRS, Glen Ellyn, Illinois) gave a talk entitled “What Variable Stars Tell Us” to a capacity audience (120+ seats) at Harper College, Palatine, Illinois. Roger writes, “After the talk (given on Astronomy Day) I spent about an hour answering questions about the talk. This was, by far, the most successful talk I have given.”

*June 14, 2014*—**Mike Simonsen** (SXN, Imlay City, Michigan) gave a paper entitled “The Z CamPaign: Year Five” at the SAS/AAVSO/CBA meeting Ontario, California.

*June 28, 2014*—**Mike Simonsen** gave a talk entitled “Stargazer to Citizen Scientist” at the Berlin Heights Library, Berlin Heights, Ohio, Discover Astronomy @ The Library event.

Upcoming talks include:

*July 16, 2014*—**Roger Kolman** will repeat his “What Variable Stars Tell Us” talk for the Lake County Astronomers at Volo Bog State Natural Area, Grant, Illinois.

*July 25, 2014*—**Kristine Larsen** (LKR, New Britain, Connecticut) will present “How to Use a Medieval Astrolabe” at Stellafane, Breezy Hill, Vermont.

*July 26, 2014*—**John O’Neill** (ONJ, Topsfield, Massachusetts, and Rush, Ireland) will speak on “The Visual Observer’s Guide to CCD Photometry” at Stellafane, Breezy Hill, Vermont.

*September 18, 2014*—**Gary Poyner** (PYG, Birmingham, England) will speak on “Introduction to Variable Star Observing” at the Mexborough (UK) Astronomical Society meeting.

Thank you, speakers!

Let us help you spread the word! Send us information about your event (upcoming or past) for inclusion in the April AAVSO Newsletter (submission deadline September 15). Many thanks for your education and outreach efforts on behalf of the AAVSO and variable star observing! ★

*Ed. note: following is the Spanish language text of Arne's Director's message.*

## MENSAJE DEL DIRECTOR

**ARNE A. HENDEN (HQA)**

Ha sido un trimestre movido, preparándonos para los dos grandes encuentros que tuvieron lugar. Primero, la American Astronomical Society (AAS) organizó su encuentro de verano en Boston y participamos activamente. Tuvimos un stand (muy bien ubicado en frente del auditorio de charlas) que fue atendido por miembros y voluntarios profesionales de AAVSO como así también por personal de HQ, que estuvieron allí entre las 7:30 AM y las 6:30 PM cada día. En particular John Martin y Kristine Larsen pasaron muchas horas charlando con los asistentes acerca de AAVSO y las estrellas variables en general. El stand fue un nuevo módulo portátil de Skyline, con tres paneles con información de AAVSO. El staff creó una presentación PowerPoint que se repetía, mostrando la mayoría de los programas de AAVSO, la cual mostramos en dos iPads. Pen drives con nuestro más reciente manual tutorial de DSLR, como así también copias de nuestros otros manuales y material de referencia, estuvieron disponibles para los asistentes. Las estrellas del show, sin embargo, ¡fueron los Tootsie-Rolls (caramelos) en miniatura! Creo que el staff hizo un muy buen trabajo de diseño y elección del

material apropiado para las diapositivas.

Durante ese encuentro, la AAVSO también llevó a cabo una Sesión Especial de Astronomía en el Dominio Temporal, con charlas de varios expertos, tales como Brad Schaefer y David Turner. También fui invitado a dar una charla sobre "Ciencia Ciudadana en la Era de los Surveys" que tuvo buena recepción. Creo que la AAVSO estuvo bien representada en ese encuentro, y todos con quienes hablamos respetaron el trabajo que están haciendo los observadores.

La siguiente semana tuvo lugar el encuentro conjunto de SAS/AAVSO/CBA, con alrededor de 170 participantes registrados. Di un taller de transformación fotométrica, destacando los excelentes programas que Gordon Myers, George Silvis y Richard Sabo han creado para que la transformación sea más fácil. Vamos a lanzarlos públicamente a la comunidad pronto. También tuve el honor de dar la charla del banquete, y me divertí mucho mencionando algunos de los desastres relacionados con el clima que he sufrido en mis 40 años de astrónomo (por suerte la charla no la grabaron...). Hubo una gran cantidad de papers de AAVSO e instalamos nuevamente nuestro stand en el área de exhibición. Me gusta la sinergia entre los tres grupos, y el nuevo lugar (Ontario Airport Hotel en lugar del Northwoods Resort) ofreció más espacio para el encuentro y

sitios para reuniones informales. El bar también estaba abierto después de las 9 PM y fue el punto focal para muchas discusiones.

Otros sucesos recientes en la sede central incluyen un nuevo manual de observación de DSLR, basado en el taller que dimos el año pasado; una visita de Brad Schaefer para trabajar en novae recurrentes utilizando la colección de placas de Harvard; el envío de BSM Berry a Perth (Greg Bolt); la marca alcanzada de 25 millones de observaciones en la Base de Datos Internacional de AAVSO y la difusión de nuevos cursos CHOICE sobre VStar y VPHOT.

Oh sí, luego tuvo lugar el encuentro de dos días del Consejo para elegir al próximo Director. Apuesto a que van a saber más de eso en el próximo newsletter. Todos los candidatos fueron excelentes, lo cual fue uno de los mejores resultados de la búsqueda – la AAVSO es obviamente una gran atracción para los talentos más destacados.

Una de las cosas buenas de la AAVSO es su carácter internacional. Al mismo tiempo que puede hacer calor con noches cortas aquí en HQ, aquellos que viven en el hemisferio sur disfrutan de largas noches de invierno. ¡Ese es un clima perfecto para la observación de variables sureñas! Cielos claros para todos. ★

*Ed. note: following is the Spanish language text of Jenó's President's message.*

## MENSAJE DEL PRESIDENTE

**JENO SOKOLOSKI**

por Jenó Sokoloski y Kevin Marvel

El 11 de junio de 2014, el Consejo escogió al próximo Director de AAVSO. En pocos meses más, vamos a anunciar el nombre del nuevo Director.

El voto del Consejo sobre el nuevo director tomó una mañana completa. Fue, sin embargo, la culminación de un año y medio de trabajo del Consejo y del Comité de Selección. En la columna anterior, hice una lista de las 10 responsabilidades básicas del Consejo de gobierno de una organización sin fines de lucro. Una de esas responsabilidades es la de seleccionar al jefe ejecutivo. Aunque el Consejo general sólo selecciona un nuevo Director por década o décadas, la organización percibe el impacto de esta decisión a diario. Así que, aquí paso a describir

el proceso que utilizamos para seleccionar a la persona que dirigirá la organización después que Arne Henden se retire, a principios de 2015.

El primer paso de este proceso, realizado en enero de 2013 por el entonces presidente Mario Motta, fue nombrar a Kevin Marvel como presidente del Comité de Selección. Kevin es un ex miembro del Consejo, ex vicepresidente y Director Ejecutivo de la AAS (Sociedad Astronómica Americana). Los otros miembros del Comité de Selección fueron: Mario Motta (ex Presidente, astrónomo aficionado), Lee Anne Willson (ex presidente, astrónoma profesional), Richard Sabo (astrónomo aficionado), Gary Walker (Secretario, ex presidente, astrónomo aficionado), Ed Guinan (astrónomo profesional), Aaron Price (ex Director Adjunto) y Jenó Sokoloski (Presidente, astrónomo profesional). La tarea del Comité consistía en utilizar un proceso justo y riguroso para encontrar los mejores candidatos posibles y el orden de mérito a consideración del Consejo.

Solicitamos que se postulasen candidatos mediante la publicación estratégica de un anuncio de trabajo

y animando directamente a la mayor cantidad de candidatos prometedores para que se postulasen. El Consejo puso la bola a rodar en febrero de 2013 al escribir una cuidadosa descripción del puesto de trabajo. Según los expertos en liderazgo sin fines de lucro, un director general para este tipo de entidades debe: 1) comprometerse con la misión; 2) liderar al personal y gestionar la organización; 3) ejercer una administración financiera responsable; 4) dirigir y administrar la recaudación de fondos; 5) encuadrarse en los más altos estándares éticos, garantizar la rendición de cuentas y cumplir con la ley; 6) participar con el Consejo en la planificación y dirigir la ejecución; 7) desarrollar el liderazgo futuro; 8) construir relaciones externas y servir como defensor; 9) garantizar la calidad y eficacia de los programas; y 10) apoyar al Consejo. El Director de la AAVSO también debe proporcionar un liderazgo científico y técnico relacionado con la observación astronómica y la investigación. En abril de 2013, el Comité de Selección comenzó a realizar teleconferencias regulares y, para mediados de 2013, el anuncio de trabajo y su descripción se había publicado en el sitio web

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## MENSAJE DEL PRESIDENTE CONTINUED...

de AAVSO y en el registro de trabajo de la AAS, con plazo de solicitud al 30 de septiembre de 2013. Hemos recibido solicitudes de un fuerte grupo de candidatos con una amplia variedad de conocimientos.

En los últimos meses de 2013, la mayor parte del trabajo de la Comisión de Selección se centró en establecer criterios sólidos que permitieran evaluar a los solicitantes. El resultado final fue una lista de cinco categorías bien definidas:

- Gestión: funciones internas de la organización,
- Liderazgo: relaciones con la comunidad de AAVSO,
- Credenciales: capacidad para representar a AAVSO en la comunidad profesional,
- Enseñanza y extensión: capacitación y alcance al público,
- Recaudación de fondos: capacidad para reunir recursos que exceda las cuotas sociales y las reuniones, y
- Otros: un conjunto de habilidades y experiencia no incluidas en otra parte.

Éramos conscientes que, en cada categoría, habría candidatos con experiencia que nos permitiría evaluarlos en la competencia demostrada. Habría otros para los que necesitaríamos hacer nuestro mejor juicio acerca de si tendrían el talento y podrían, así, desarrollar esas habilidades. En su puntuación, cada miembro del Comité de Selección tuvo libertad para ponderar las diferentes categorías como mejor le pareciera.

A medida que trabajábamos para finalizar estos criterios, también nos preparamos para evitar el sesgo consciente o inconsciente durante la selección de candidatos. Algunos ejemplos de las prácticas que utilizamos para evitar el sesgo incluyen: la definición de los criterios de evaluación antes de la lectura de las solicitudes, haciendo una primera ronda de clasificación en forma individual, antes de hablar de los solicitantes, listando las justificaciones de nuestros resultados, haciendo referencia a estas justificaciones en la discusión de nuestro ranking, y con estricto apego al conjunto de criterios predefinido. También fue importante la clara declaración y discusión de los posibles conflictos de interés. Tuvimos una ronda de discusión sobre conflictos de interés y no se identificaron conflictos de fondo. El 21 de enero

de 2014, presentamos un informe de situación al Consejo en el que describimos este proceso, en detalle.

Después de la primera ronda de puntuación y discusión, el Comité de Selección decidió llevar a cabo entrevistas telefónicas con los 11 mejores candidatos. Se realizó una entrevista de una hora con cada candidato, utilizando un conjunto de preguntas estándar, la misma persona preguntó de la misma forma. Estos son algunos ejemplos de las preguntas realizadas:

"¿Cuál es su visión de cómo se deberá ver AAVSO, de lo que vamos a hacer, 5 a 10 años en el futuro?"

"En cuanto a su trabajo actual [o a su último trabajo, si está buscando uno nuevo], ¿cómo su trabajo (o liderazgo) aumentan el impacto de la organización? Estamos más interesados en el contraste entre cuando empezó y cómo quedó cuando dejó o deje la organización, cuando tome posesión del cargo de Director de AAVSO?"

"¿Cómo describiría los valores personales y la filosofía que lo guiará a medida que usted proporcione liderazgo a la AAVSO en este cargo?"

Como no todos los miembros del Comité de Selección pudieron participar en cada llamada telefónica, hemos utilizado una o dos personas para compilar representaciones precisas de las respuestas de cada candidato, y distribuimos estos resúmenes a todos los miembros del Comité. La última entrevista telefónica se completó el 13 de febrero de 2014, después de lo cual, cada miembro del comité re-calificó y re-clasificó a cada candidato sobre la base de los criterios establecidos. El 23 de febrero de 2014, el Comité de Selección realizó una conferencia telefónica en la que se habló de diferencias significativas en puntuaciones y clasificaciones entre los distintos miembros del Comité. En este momento, el Comité de Selección presentó también un informe de avance al Consejo, describiendo el proceso de entrevista telefónica, en detalle, incluyendo la lista completa de preguntas y el número de candidatos entrevistados por teléfono.

Tras un largo debate, el Comité de Selección decidió incluir los 6 primeros candidatos en las próximas etapas del proceso, a través de llamados a las referencias proporcionadas por los candidatos. Estos 6 candidatos constituyen nuestra "lista corta". Un subcomité del Comité de Selección formuló una serie de preguntas y Kevin Marvel

tuvo la tarea de llamar a dos de las referencias proporcionadas por cada candidato. Las llamadas telefónicas promediaron los 30 minutos por cada referencia. Kevin tomó muchas notas durante el proceso sobre cada candidato y distribuyó resúmenes de las llamadas telefónicas a todo el Comité de Selección. Ningún miembro del Comité de Selección opinó que las llamadas telefónicas a las referencias cambiaran su clasificación de los candidatos; de hecho, la mayoría de los miembros del Comité señalaron que las llamadas telefónicas reforzaron sus clasificaciones. El 24 de marzo de 2014, presentamos un reporte. Este informe incluyó la lista clasificada de los mejores 11 candidatos, con las puntuaciones. Se aconsejó al Consejo mantener estricta confidencialidad de este documento.

Después de discutir las llamadas telefónicas a las referencias de los candidatos, el Comité de Selección decidió invitar a todos los 6 de los candidatos preseleccionados para visitar la sede de AAVSO (HQ). El 9, 10 y 11 de abril de 2014, Gary Walker, junto con Arne Henden y Kevin Marvel, fueron anfitriones de los seis candidatos preseleccionados en la sede. Lee Anne Willson participó por teléfono en parte de la visita de cada candidato. Las visitas tuvieron lugar por la mañana y por la tarde, con la visita de dos candidatos por día. La visita de cada candidato tuvo un programa idéntico, reuniéndose, cada candidato, primero con Arne Henden y luego realizando un recorrido por el edificio de la sede. Después del recorrido, tuvieron una entrevista de media hora con cada uno de los integrantes del personal de más jerarquía (Elizabeth Waagen, Rebecca Turner, Matthew Templeton y Mike Simonsen) seguido de una reunión de una hora con todo el personal de AAVSO. Al término de esta reunión, cada candidato tuvo una reunión de una hora con Kevin Marvel, Gary Walker, Arne Henden y , a través de FaceTime, Lee Anne Willson. Las sesiones con el personal se registraron para los pocos miembros del personal que no estaban presentes. El personal, en general, realizó preguntas idénticas a cada candidato, pero alguna variación se produjo cuando las conversaciones variaba, de acuerdo al individuo. El personal AAVSO se reunió al final de la visita de cada candidato para discutir sobre el individuo y sus méritos y, de nuevo, después de todas las visitas a la conclusión para que clasificaran a los candidatos. Rebecca Turner recibió el encargo de la redacción de la opinión de consenso de los miembros del personal, que se entregaron a Kevin Marvel. El informe del personal se distribuyó posteriormente al Comité de Selección, junto

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## MENSAJE DEL PRESIDENTE CONTINUED...

con los enlaces a las sesiones grabadas. Después de discutir las visitas a la sede, los miembros del Comité de Selección re-calificaron y re-clasificaron a los candidatos.

El 9 de mayo de 2014, el Comité de Selección presentó su informe final al Consejo. Ese informe contiene una lista clasificada de los 6 candidatos preseleccionados, con una descripción de las fortalezas y debilidades de cada uno, junto con una recomendación de que el Consejo entreviste a los tres principales candidatos. El informe final al Consejo incluyó también los resúmenes y las cartas de solicitud, resúmenes de las entrevistas telefónicas, resúmenes de las llamadas telefónicas con cada una de las referencias de los candidatos y los resúmenes de las visitas a la sede de cada uno de los 6 candidatos preseleccionados. El informe cierra con un recordatorio a Consejo que su contenido es confidencial.

El 10 de junio de 2014, en Ontario, CA, el Consejo entrevistó a los tres finalistas para el cargo de Director. Para preparar tanto al Consejo como a los finalistas para las entrevistas, enviamos

a todas las partes un informe del Comité de Transición (que se describe en el boletín de abril), titulado "Problemas heredados y oportunidades de AAVSO y su nuevo Director". El Consejo se reunió con cada candidato dos veces - una vez en la mañana y otra por la tarde. Las entrevistas de la mañana fueron muy similares para cada candidato, para que cada consejero que no había sido miembro del Comité de Selección tuviese oportunidad de interrogar a los candidatos en un conjunto preestablecido de temas. Por la tarde, el Consejo realizó preguntas específicas a cada candidato, y se otorgó a los candidatos la oportunidad de interrogar al Consejo. Tres consejeros participaron en las entrevistas por vía electrónica y uno (que estaba muy familiarizado con los candidatos debido a ser miembro del Comité de Selección ) no pudo participar, debido a un conflicto de programación. El 11 de junio de 2014, se realizaron varias rondas de votación, y teniendo en cuenta todos los materiales de la Comisión de Selección, así como las entrevistas finales, el Consejo clasificó a los 3 finalistas. Un voto adicional confirmó al candidato mejor clasificado con el apoyo de más del 75 % del Consejo, como es requerido por los Estatutos para la contratación de un nuevo Director. Todos

los miembros del Consejo participaron en la votación.

Estamos encantados de informar que hemos hecho una oferta a uno de los candidatos y que esa oferta ha sido aceptada verbalmente. Nos gustaría dar las gracias al Comité de Selección para su duro trabajo. También damos las gracias a la excelente lista de candidatos, que tomaron su valioso tiempo para presentar sus cuidadosas, reflexivas y, a veces, hasta visionarias solicitudes. Muchos de los solicitantes son miembros dedicados de la comunidad de AAVSO y trajeron un conjunto maravillosamente diverso de habilidades e ideas a la mesa. Con todo el proceso de selección completo, el voto del Consejo el 11 de junio de

### A NOTE ON THE TRANSLATIONS

We are grateful to Sebastian Otero and Jaime García for providing, respectively, the Spanish language versions of the Director's and President's messages. We hope that readers of the *Newsletter* will enjoy this feature.

## VISUAL OBSERVING MANUAL IN SPANISH—2013 EDITION

The Spanish version of the 2013 edition of the *Manual for Visual Observing of Variable Stars—Manual para la Observación Visual de Estrellas Variables*—is now available for download here:

<http://www.aavso.org/visual-observing-manual-spanish>

It is hoped that people who speak Spanish will find this translation useful and it will encourage them to learn the art and science of variable star observing. The Manual is available free-of-charge and may be reproduced and distributed as needed.

Many thanks to Jaime García for all his hard work translating both the original version and this updated version of the Manual.

La versión en español de la edición de 2013 del *Manual para la Observación Visual de Estrellas Variables* ya está disponible para bajar aquí:

<http://www.aavso.org/visual-observing-manual-spanish>

Esperamos que esta traducción le resulte útil a la gente que habla español y los incentive a aprender al arte y la ciencia de observar estrellas variables. El Manual está disponible sin cargo y puede reproducirse y distribuirse como sea necesario.

Muchas gracias a Jaime García por su arduo trabajo traduciendo tanto la versión original como esta versión actualizada del Manual. ★

## LOOKING AT LEGACY STARS

### STARS OBSERVED RECENTLY AND RECOMMENDATIONS FOR THE NEXT FEW MONTHS

ELIZABETH O. WAAGEN (WEO), AAVSO SENIOR TECHNICAL ASSISTANT

SARA J. BECK (BSJ), AAVSO TECHNICAL ASSISTANT

This column, introduced in *AAVSO Newsletter 54* (October 2012), is a quarterly summary of popular and important targets of the previous quarter as observed by the AAVSO community. This will help keep observers up to date on the observations being submitted to the AAVSO archives, and more importantly on what stars may need improved coverage by the community.

We encourage observers to keep a smaller subset of variables at the top of their observing planning via the Legacy and Program lists for LPVs and CVs (see <https://sites.google.com/site/aavsolpsection/Home/lpv-files> for the LPV lists, and <https://sites.google.com/site/aavsovcvsection/aavso-legacy-cvs> for the CV list). These lists were established to provide guidance on which stars had the best-observed light curves and thus had greatest potential for science

if those stars continued being observed. There are thousands of other stars that are still regularly observed, and many objects not on the lists above remain worthy targets for variable star observers, visual and CCD alike.

Target lists for observers vary throughout the year, and the number of observations received changes depending upon a star's observability in a given season as well as whether there is special interest—for example, an observing campaign or recent notable activity. Quarterly totals also help to highlight what new and interesting data sets the AAVSO now holds.

Below are the most- and least-observed stars of the LPV and CV Legacy lists, showing the number of visual and CCD observers (N(vo) and N(co)) along with the total number of nights observed (N(von) and N(con)).

Top nineteen best-covered stars of the LPV Legacy program, as measured (mainly) by number of nights observed, 2014 March 16 through June 15:

Name	Con	R.A.(J2000)	Dec.(J2000)	N(vo)	N(von)	N(co)	N(con)
T Cep	Cep	21:09:31.78	+68:29:27.1	36	85	0	0
RY Dra	Dra	12:56:25.9	+65:59:39.7	30	85	0	0
V CVn	CVn	13:19:27.77	+45:31:37.7	37	84	0	0
R Leo	Leo	09:47:33.48	+11:25:43.7	97	84	4	7
Z UMa	UMa	11:56:30.22	+57:52:17.6	74	84	3	19
AF Cyg	Cyg	19:30:12.84	+46:08:52	30	80	0	0
ST UMa	UMa	11:27:50.37	+45:11:06.7	31	79	0	0
RY UMa	UMa	12:20:27.32	+61:18:34.6	34	77	1	1
S UMa	UMa	12:43:56.67	+61:05:35.4	53	76	3	4
CH Cyg	Cyg	19:24:33.06	+50:14:29	39	75	6	59
R UMa	UMa	10:44:38.46	+68:46:32.7	52	75	3	3
mu Cep	Cep	21:43:30.49	+58:46:48	20	74	1	5
g Her	Her	16:28:38.54	+41:52:53.9	24	74	1	6
X Her	Her	16:02:39.16	+47:14:25.2	22	72	1	7
W Cyg	Cyg	21:36:02.49	+45:22:28.4	23	70	0	0
R Boo	Boo	14:37:11.57	+26:44:11.6	42	55	5	13
rho Cas	Cas	23:54:23.03	+57:29:57.8	23	51	2	15
R Cen	Cen	14:16:34.31	-59:54:49.2	10	30	3	14
Z Pup	Pup	07:32:38.05	-20:39:29.2	4	7	1	24

N(vo) = number of observers making visual observations

N(von) = number of nights with visual observations

N(co) = number of observers making CCD observations

N(con) = number of nights with CCD observations

Thirteen least-observed stars of the LPV Legacy program during the quarter 2014 March 16 through June 15:

Name	Con	R.A.(J2000)	Dec.(J2000)	N(vo)	N(von)	N(co)	N(con)
TU Cyg	Cyg	19:46:10.67	+49:04:24.4	9	14	2	4
R Cyg	Cyg	19:36:49.38	+50:11:59.4	8	14	1	2
R Lep	Lep	04:59:36.34	-14:48:22.5	13	14	0	0
S Aql	Aql	20:11:37.47	+15:37:14.5	6	13	2	5
R Cas	Cas	23:58:24.87	+51:23:19.7	7	13	0	0
R And	And	00:24:01.94	+38:34:37.3	8	11	0	0
R Tri	Tri	02:37:02.33	+34:15:51.4	11	9	0	0
W Per	Per	02:50:37.89	+56:59:00.3	4	7	0	0
R Aqr	Aqr	23:43:49.45	-15:17:04.1	3	6	1	5
omi Cet	Cet	02:19:20.78	-02:58:39.5	2	5	0	0
W And	And	02:17:32.95	+44:18:17.7	3	4	0	0
R Ari	Ari	02:16:07.1	+25:03:23.6	2	2	0	0
R Peg	Peg	23:06:39.17	+10:32:36	1	2	1	7

Observations are strongly encouraged as these stars become observable. Observers should consider adding any of these stars to their observing programs to improve coverage of the legacy stars.

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LEGACY STARS  
CONTINUED...

Stars in CV Legacy list with no visual or CCD observations during the quarter 2014 March 16 through June 15:

Name	Con	R.A.(J2000)	Dec.(J2000)	N(vo)	N(von)	N(co)	N(con)
LS And	And	00:32:10.21	+41:58:11.6	0	0	0	0
TT Ari	Ari	02:06:53.09	+15:17:41.7	0	0	0	0
SV Ari	Ari	03:25:03.34	+19:49:52.8	0	0	0	0
AH Eri	Eri	04:22:38.04	-13:21:30.3	0	0	0	0
BB Vel	Vel	08:36:49.26	-47:22:37	0	0	0	0
AG Hya	Hya	09:50:29.75	-23:45:17.2	0	0	0	0
V485 Cen	Cen	12:57:23.28	-33:12:06.5	0	0	0	0
NN Cen	Cen	13:14:15.6	-60:52:46.5	0	0	0	0
V803 Cen	Cen	13:23:44.53	-41:44:29.6	0	0	0	0
V504 Cen	Cen	14:12:49.18	-40:21:37.5	0	0	0	0
V2051 Oph	Oph	17:08:19.11	-25:48:30.3	0	0	0	0
FV Ara	Ara	17:35:10.05	-63:02:50.3	0	0	0	0
V1830 Sgr	Sgr	18:13:50.65	-27:42:21	0	0	0	0
V533 Her	Her	18:14:20.51	+41:51:22.6	0	0	0	0
FM Sgr	Sgr	18:17:18.25	-23:38:27.8	0	0	0	0
V441 Sgr	Sgr	18:22:08.09	-25:28:47.3	0	0	0	0
CH Her	Her	18:34:46.32	+24:48:01.6	0	0	0	0
V4021 Sgr	Sgr	18:38:14.88	-23:22:47.1	0	0	0	0
FO Aql	Aql	19:16:38.11	+00:07:37.4	0	0	0	0
DH Aql	Aql	19:26:10.81	-10:15:28.9	0	0	0	0
NQ Vul	Vul	19:29:14.75	+20:27:59.7	0	0	0	0
LV Vul	Vul	19:48:00.7	+27:10:19.5	0	0	0	0
V1819 Cyg	Cyg	19:54:37.44	+35:42:16	0	0	0	0
V476 Cyg	Cyg	19:58:24.47	+53:37:06.7	0	0	0	0
AW Sge	Sge	19:58:37.07	+16:41:27.8	0	0	0	0
RR Tel	Tel	20:04:18.54	-55:43:33.2	0	0	0	0
QU Vul	Vul	20:26:46.02	+27:50:43.2	0	0	0	0
KK Tel	Tel	20:28:38.46	-52:18:45.2	0	0	0	0
TU Ind	Ind	20:33:10.55	-45:26:00.8	0	0	0	0
VY Aqr	Aqr	21:12:09.19	-08:49:36.9	0	0	0	0
CP Lac	Lac	22:15:41.15	+55:37:01.4	0	0	0	0
IP Peg	Peg	23:23:08.59	+18:24:59.6	0	0	0	0

As above, observations are strongly encouraged as these stars become observable and observers should consider adding any of these stars to their observing programs to improve coverage of the legacy stars. ★

Top eighteen best-covered stars of the CV Legacy program, as measured (mainly) by number of observers and nights observed, 2014 March 16 through June 15:

Name	Con	R.A.(J2000)	Dec.(J2000)	N(vo)	N(von)	N(co)	N(con)
T CrB	CrB	15:59:30.16	+25:55:12.6	49	86	6	31
Z Cam	Cam	08:25:13.18	+73:06:39	39	84	6	34
SS Cyg	Cyg	21:42:42.78	+43:35:09.8	48	81	7	63
CH Cyg	Cyg	19:24:33.06	+50:14:29.1	39	75	6	59
AG Dra	Dra	16:01:41.01	+66:48:10.1	29	69	3	33
U Gem	Gem	07:55:05.21	+22:00:04.7	38	68	7	35
CH UMa	UMa	10:07:00.68	+67:32:47	15	63	3	10
X Leo	Leo	09:51:01.41	+11:52:30.2	25	61	2	12
SU UMa	UMa	08:12:28.27	+62:36:22.2	19	60	2	4
DO Dra	Dra	11:43:38.39	+71:41:20	12	60	2	4
SW UMa	UMa	08:36:42.71	+53:28:37.8	11	57	2	15
SY Cnc	Cnc	09:01:03.31	+17:53:56	22	57	14	69
YZ Cnc	Cnc	08:10:56.63	+28:08:33.2	14	54	3	32
AH Her	Her	16:44:10.01	+25:15:02	18	51	14	71
TX CVn	CVn	12:44:42.05	+36:45:50.6	13	45	5	56
AT Cnc	Cnc	08:28:36.89	+25:20:02.9	10	42	10	61
VW Vul	Vul	20:57:45.06	+25:30:25.7	2	2	8	58
HP Nor	Nor	16:20:49.56	-54:53:22.8	0	0	3	70

PHOTOELECTRIC PHOTOMETRY PROGRAM UPDATE  
MATTHEW TEMPLETON (TMT), AAVSO SCIENCE DIRECTOR

The second quarter of 2014 starting April 1 showed a strong increase in the number of observations over the previous quarter, an increase likely due to moderating weather in the United States following a difficult winter. A total of six different AAVSO PEP observers collected 838 observations of 36 different stars.

Gerald Persha (PGD) leads the quarter with 707 observations of nine different stars, including an interesting multi-night PEP time-series of the low-amplitude delta Scuti star AI CVn. This interesting star has multiple, independent pulsation frequencies operating at the same time, producing a very complicated light curve. Even with single-site data, you can see from his observations that there are complicated things happening—it's an interesting data set for a star that's normally pursued only by delta Scuti enthusiasts. PEP Chairman Jim Fox (FXJ) was in second place overall with 74 observations (73 in the V band, one in B), but in first with the number of stars observed—23 different targets during the season! Charles Calia (CCB) had 21 observations of four different stars, followed by Pat Rochford (RPT; 14 observations of six stars), Jim Kay (KJMB; 13 observations of two stars), and Tom Calderwood (CTOA; nine observations of one star).

AI CVn led the totals for the quarter, as it was the target for Gerry Persha's time-series campaign, with a total of 544 observations. The next ten best-observed stars were: XY Leo (66), RS CVn (24), W Boo (19), CH Cyg (18), R Lyr (16), X Her (16), Y CVn (15), g Her (14), RS Cnc (11), and TV UMa (11). These targets are a nice mix of pulsating giants, active (spotted) stars, and a long-term campaign target, CH Cyg (see *Special Notice #320* for more

CONTINUED ON NEXT PAGE

PEP UPDATE  
CONTINUED...

information). We're well into our Northern Spring and Summer targets list now, with stars in Virgo, Coma, Ophiuchus, and Gemini making up the bulk of the remaining stars. As in last quarter's report, I'll once again recommend CH Cyg as a good target for observers, as well-calibrated B and V data are highly valued by the PI, Margarita Karovska of Harvard-Smithsonian Center for Astrophysics. It will be much easier (for our Northern observers at least) to observe in the coming quarter, so please give it a try! Take a look at the light curve of CH Cyg in the Campaigns update in this newsletter to see your observations in action.

One brief note regarding epsilon(V) coefficients: if you decide to use PEPObs for your V-band reductions, we need to have an up-to-date value for your epsilon(V) transformation coefficient in our system. If you measure your coefficient, please either send us a copy of the data form with raw red-blue counts, or send us the coefficient if you calculate it yourself. Additionally, please send it to the AAVSO general email address ([aavso@aavso.org](mailto:aavso@aavso.org)) and to both Matthew Templeton ([matthewt@aavso.org](mailto:matthewt@aavso.org)) and Jim Fox ([makalii45@gmail.com](mailto:makalii45@gmail.com)). The reason for this is emails are sometimes mistakenly caught by spam control software, and your emails may get lost if sent to only one person. (That actually happened with one observer's epsilon(V) this quarter!)

A note about AAVSO PEP Program stars: the original list of targets was established so that observers could make single-filter (V-band) measures of a short, focused list of stars, enabling both easy reduction by the PEP chair and easier analysis by researchers trying to combine data from multiple users. This list still exists, and observers can still use the AAVSO's PEPObs web tool to submit single-filter data. If you're a novice with PEP and looking to start contributing, this is the place to look for targets:

<http://www.aavso.org/suggested-stars-pep-observers>

That said, we very strongly encourage observers with multiple filters to give them a try, and to explore new targets of interest to them. Our only request that if you make PEP observations, you should (a) transform them to a standard system of your filter set, and (b) use reliable comparison star magnitudes where available. For the latter, we have used data from the *General Catalogue of Photometric Data* (Mermilliod and Mermilliod) in the past, and some bright star comparison data may be available from the AAVSO's own Bright Star Monitor as well. If you have multiple filters available but need pointers on doing data reductions or finding good comparison star magnitudes, you're welcome to contact PEP chair Jim Fox ([makalii45@gmail.com](mailto:makalii45@gmail.com)) or AAVSO headquarters.

To learn more about PEP observing and the AAVSO PEP program visit:

<http://www.aavso.org/aavso-photoelectric-photometry-pep-program>

Clear skies! ★

## EXPAND YOUR HORIZONS

JIM FOX, PEP SECTION CHAIR

At magnitudes circa 5.8 and 7.7, respectively, Uranus and Neptune are within reach of most PEP observers in the AAVSO program. Both planets exhibit long-term, seasonal brightness variations, as well as shorter-term, rotational, brightness changes.

The seasonal changes are due to differing reflectivity of the polar regions relative to the equatorial regions. In addition, since Uranus' rotation axis lies close to its orbital plane, the oblate planet presents a larger reflecting surface area as its pole swings toward observers on Earth. Long-term studies try to correlate these changes in brightness to changes in sub-Earth latitude.

Rotational changes may be due to changes in atmospheric composition or the appearance/disappearance of high-altitude clouds. These studies look for variation as a function of sub-Earth latitude and longitude.

The current apparition for both planets is just beginning and both planets now will be placed conveniently for observation by both northern and southern hemisphere observers. In mid-July, Neptune, in Aquarius, rises about 9:00 p.m. local time and is high enough for PEP measurements soon after midnight. Uranus, in Pisces, rises shortly before midnight and is high enough for PEP measurement just before morning twilight. As the season progresses, these planets will be placed more favorably in the late evening.

Two suitable comparison stars for Neptune include sigma Aqr [V = 4.82, (B-V) = -0.06] and 64 Aqr [V = 7.16, (B-V) = 0.44]. Suitable comparison stars for Uranus include epsilon Psc [V = 4.273, (B-V) = 0.967] and 60 Psc [V = 5.981, (B-V) = 0.939]. Since the planets are not in the AAVSO International Database or the AAVSO PEP Program, observers will have to reduce their observations themselves. Contact the PEP Chair for assistance.

Star	Coordinates (2000)		
	R.A. h m s	Dec. ° ' "	
σ Aqr	22 30 38.81546	-10 40 40.6238	
64 Aqr	22 39 16.02796	-10 01 40.0781	
ε Psc	01 02 56.60862	+07 53 24.4855	
60 Psc	00 47 23.63068	+06 44 27.4466	

Give these challenging objects a try. If you make successful observations, they may be submitted directly to the ALPO Remote Planets Coordinator, Richard Schmude <[Schmude@gordonstate.edu](mailto:Schmude@gordonstate.edu)>, or to the AAVSO PEP Section Chair <[Makalii45@gmail.com](mailto:Makalii45@gmail.com)> who will forward them to ALPO. If you wish further information about these fascinating, but remote, planets, see Richard Schmude's book *Uranus, Neptune, and Pluto and How to Observe Them* (Springer 2008). ★

## AAVSO OBSERVING CAMPAIGNS UPDATE

ELIZABETH O. WAAGEN (WEO),  
AAVSO SENIOR TECHNICAL ASSISTANT

Each campaign is summarized on the AAVSO Observing Campaigns page (<http://www.aavso.org/observing-campaigns>), which also includes complete lists of all *AAVSO Alert* and *Special Notices* issued for each campaign.

### Campaigns concluded since April 1, 2014

The campaign begun by Dr. Brad Schaefer in January on the bright Type-Ia supernova **SN 2014J = PSN J09554214+6940260** in M82 (*AAVSO Alert Notice 495*) has concluded. Despite very good coverage (Figure 1), no significant flares or dips that had confirmation or multiple points on the light curve were seen. (Dr. Schaefer had said that this exploratory search for possible flares or other short-term photometric variations during the outburst was a speculative venture.) He thanks AAVSO observers very much and says he may try this type of campaign in the future on another bright well-placed supernova.

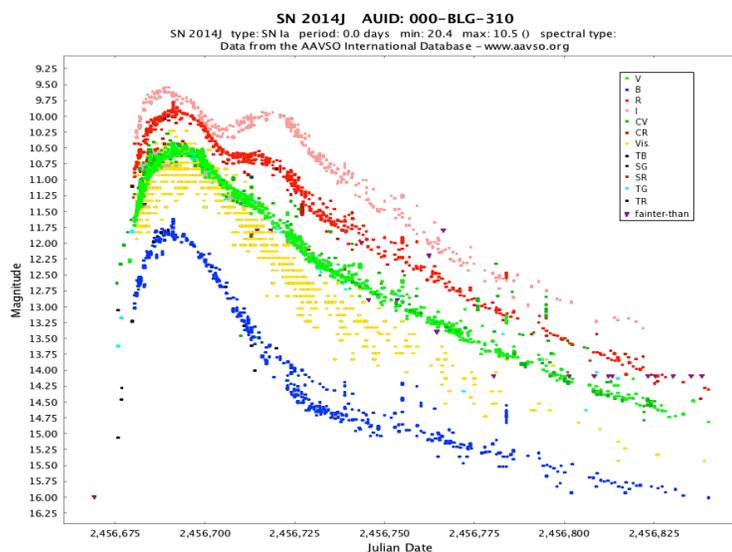


Figure 1. AAVSO light curve of SN 2014J JD 2456669.169979–2456839.610671 (11 January–1 July 2014). 216 AAVSO observers worldwide have contributed 19,107 observations to this light curve.

Campaigns on the recurrent nova **V745 Sco = Nova Sco 1937** begun in February when it went into outburst (*AAVSO Alert Notice 496*) have concluded. Dr. Jenő Sokolowski thanks AAVSO observers very much for their data for correlation with her multiwavelength observations. Dr. Bradley Schaefer also thanks AAVSO observers for their coverage; flaring activity was not seen.

Several campaigns whose stars are not currently observable are on hold until August/September when the targets become observable. These campaign targets include **BD+20 307**, **HD 15407A**, and **HD 23514** (*AAVSO Alert Notice 482*, *AAVSO Special Notice #373*); **S Dor** (*AAVSO Alert Notice 453*, *AAVSO Special Notices #280*, *#293*); **AA Tau** (*AAVSO Alert Notice 488*); **BP Tau** (*AAVSO Alert Notice 493*); **BP Tau**, **DN Tau**, **FK2**, **V1068 Tau (LkCa4)**, and **V1264 Tau** (*AAVSO Alert Notices 473* and *494*); and **T Ori** (*AAVSO Alert Notice 490*).

### Campaigns initiated since April 1, 2014

No campaigns have formally begun this quarter. However, a campaign on **EE Cep** is about to be announced via an AAVSO Alert Notice. Stay tuned!

### Campaigns in progress

Dr. Eric Mamajek's campaign on **J1407 (1SWASP J140747.93-394542.6)** (*AAVSO Alert Notice 462*) has been extended through 2014. He writes: "...Thus far [since 2012] there is no sign of eclipse.... This introduces the interesting possibility that the 2001 dip was from another body in the J1407 system." Since that was written a year ago, AAVSO observers have continued to provide excellent coverage and no eclipse has been observed, so please continue your observations—they are extremely important in helping to solve the puzzle of this interesting and possibly complex system (*AAVSO Alert Notice 462*). Three observers have contributed 1,385 multicolor observations to date.

Dr. Margarita Karovska's HST and Chandra campaign on **CH Cyg** (*AAVSO Alert Notice 454* and *AAVSO Special Notices #267*, *294*, and *320*) continues through the 2014 observing season at least. Dr. Karovska asks observers please to continue, especially in V and B. The V and B data are crucial for detecting certain significant system changes key to her research. Since this campaign began in March 2012, 179 observers have contributed 19,741 visual and multicolor observations! As Figure 2 shows, your excellent coverage clearly shows the intricate behavior of this most interesting system. Thank you and please keep up the good work.

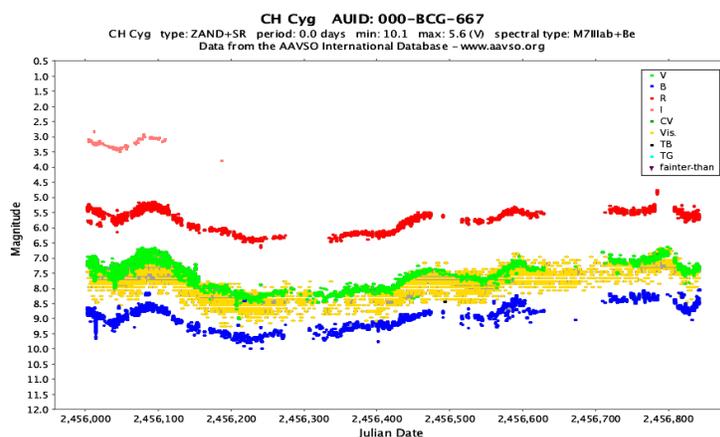


Figure 2. AAVSO light curve of the symbiotic variable CH Cyg JD 2456000.0024–2456839.8229 (13 March 2012–1 July 2014). 179 observers worldwide have contributed 19,741 observations to this light curve.

Ernst Pollmann's campaign on **P Cyg**, and **S Dor** (= Luminous Blue Variable) variable (*AAVSO Alert Notice 440*), continues at least through the 2014 season and likely "for several more years." Since May 2011, 87 observers have contributed 3,438 observations to this campaign ideally suited to PEP and DSLR observers (see Figure 3). See *Alert Notice 440* for comparison and check star information. Many thanks for your observations, and please keep on observing P Cyg!

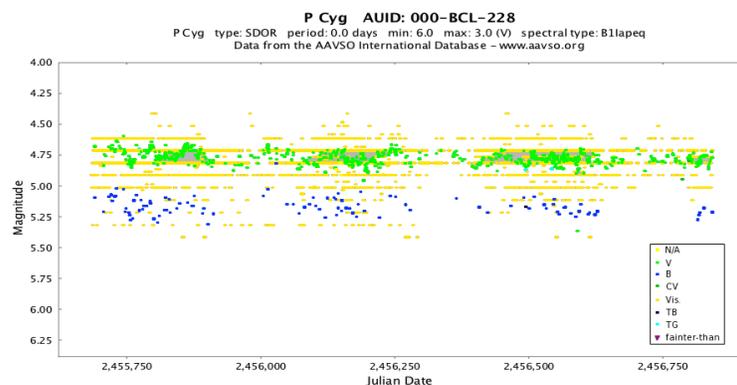
CAMPAIGNS UPDATE  
CONTINUED...

Figure 3. AAVSO light curve of the luminous blue variable P Cyg JD 2455680.5458–2456838.6763 (29 April 2011–29 June 2014). 87 observers worldwide have contributed 3,438 observations to this light curve.

**HMXBs and SFXTs**—High-Mass X-ray Binaries and Super Fast X-ray Transients, Dr. Gordon Sarty's list (*AAVSO Alert Notices* 348, 354, and 377, *AAVSO Special Notices* #118, #129, #143, #213, and #220, and description of research program in *JAASO*, Vol. 35, p. 327; article viewable at <http://adsabs.harvard.edu/abs/2007JAVSO...35..327S>)

**Blazars**—Dr. Markus Boettcher's list (*AAVSO Alert Notice* 353 at <http://www.aavso.org/aavso-alert-notice-353>)

**QX Pup**—Mira variable (<http://www.aavso.org/qx-pup>)

**Novae**

As of June 30, no new galactic novae have been discovered since Nova Sco 2014 at unfiltered magnitude 10.1 on March 26 and Nova Cyg 2014 at unfiltered 10.9 on March 31.

**V5666 Sgr = Nova Sagittarii 2014 (PNV J18250860-2236024)**—This very interesting nova continues to fade. As of June 30.11522 UT, V5666 Sgr is 12.844V (HMB, J. Hamsch, Mol, Belgium).

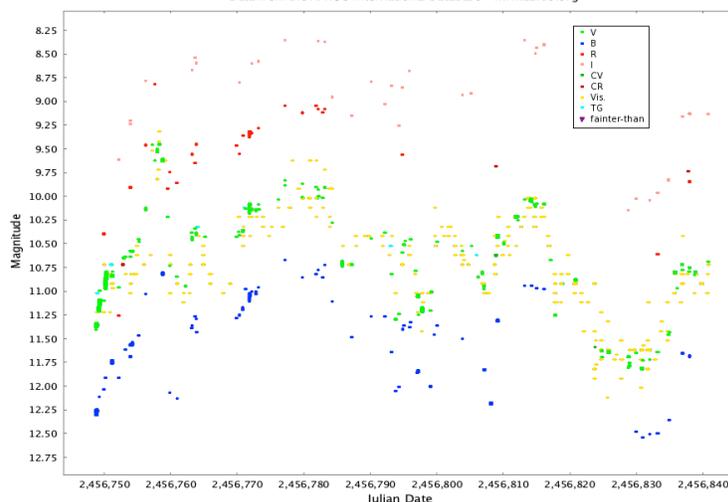
**V962 Cep = Nova Cephei 2014 (TCP J20542386+6017077)**—This classical nova is also continuing to fade. As of June 26.0034 UT V962 Cep is 15.755V (BDG, D. Boyd, Wantage, England).

**Nova Scorpii 2014 (TCP J17154683-3128303)**—This very interesting symbiotic nova has been declining quite fast, and as of June 26.6064 UT it is 16.386 V (HKEB, K. Hills, Hartford, England).

**Nova Cygni 2014 (PNV J20214234+3103296)**—This highly reddened classical Fe II-type nova has been very active (Figure 4). As of June 30.9792 UT, it is visual magnitude 10.9 (WKL, K. Wenzel, Grossostheim, Germany).

**V1369 Cen = Nova Centauri 2013 = PNV J13544700-5909080** continues to decline slowly. As of June 30.9944 UT it is visual magnitude 8.0 (AAX, A. Amorim, Florianopolis, Brazil).

**Nova Cyg 2014 AUID: 000-BLH-344**  
Nova Cyg 2014 type: N period: 0.0 days min: 22.0 max: 9.3 0 spectral type:  
Data from the AAVSO International Database - www.aavso.org



Caption for Figure 4: AAVSO light curve Nova Cygni 2014 JD 2456748.44762–2456840.42361 (31 March–30 June 2014). 55 observers worldwide have contributed 1,599 observations to this light curve.

**V339 Del = Nova Delphini 2013 = PNV J20233073+2046041**—This very fast classical nova (class NA) continues to fade, most recently at visual magnitude 12.3 on June 30.9722 UT (CKLA, C. Kotar, Kranj, Slovenia). 526 observers worldwide have contributed 68,837 multicolor observations to date!

Please keep observing and participating in as many campaigns as your schedule and equipment permit. The astronomers and we at AAVSO Headquarters are grateful to all of you who are participating in AAVSO Observing Campaigns, and we thank you for your contributions. You have been and continue to be a vital part of variable star research! ★

GET THE LATEST  
CAMPAIGN NEWS...

Subscribe online to receive *AAVSO Alert Notices* and *Special Notices* directly to your email's inbox. Stay on top of stellar activity and get detailed information on current and upcoming observing campaigns by visiting

<http://www.aavso.org/observation-notification>

to subscribe today!

Sign up for the AAVSO online forums to read about or contribute to discussion on observing campaign targets. Postings will be sent to you by email and will also be available for viewing online. Visit <http://www.aavso.org/forums>

## JULIAN DATE / MOON PHASE CALENDARS

2,450,000 plus the value given for each date

## JULY 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 6884	2 6884	3 6882	4 6883	5 6884
6 6846	7 6846	8 6847	9 6848	10 6849	11 6850	12 6851
13 6852	14 6853	15 6854	16 6855	17 6856	18 6857	19 6858
20 6859	21 6860	22 6861	23 6862	24 6863	25 6864	26 6865
27 6866	28 6867	29 6868	30 6869	31 6870		

## AUGUST 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 6871	2 6872
3 6873	4 6874	5 6875	6 6876	7 6877	8 6878	9 6879
10 6880	11 6881	12 6882	13 6883	14 6884	15 6885	16 6886
17 6887	18 6888	19 6889	20 6890	21 6891	22 6892	23 6893
24 6894	25 6895	26 6896	27 6897	28 6898	29 6899	30 6900
31 6901						

## SEPTEMBER 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 6902	2 6903	3 6904	4 6905	5 6906	6 6907
7 6908	8 6909	9 6910	10 6911	11 6912	12 6913	13 6914
14 6915	15 6916	16 6917	17 6918	18 6919	19 6920	20 6921
21 6922	22 6923	23 6924	24 6925	25 6926	26 6927	27 6928
28 6929	29 6930	30 6931				

Moon calendars courtesy StarDate online

<http://stardate.org/nightsky/moon/>

## THE AAVSO MENTOR PROGRAM

Since the earliest days of the AAVSO, experienced observers have helped new observers by corresponding, answering questions, and even providing personal guidance at the telescope.

If you would like to talk with an experienced variable star observer, contact the AAVSO and we will put you in contact with the mentor program coordinator, Mike Simonsen. Just send us an email ([mentor@aaavso.org](mailto:mentor@aaavso.org)), or call 617-354-0484 to let us know you are interested in this program.

Ideally, Mike will be able to provide you with names, addresses, and phone numbers of active AAVSO observers near you. If there are none located in your area, he can at least provide you with more distant contacts. A simple phone chat with an experienced observer may provide all the feedback you need to continue progressing as an AAVSO observer.

Visit the AAVSO mentor program webpage:

<http://www.aavso.org/mentor-program>

## BY POPULAR DEMAND!

A set of twenty pdf centennial posters exhibited at AAVSO Headquarters is available for downloading from our ftp site.

The posters show portraits of the AAVSO's Directors, Presidents, Secretaries, Treasurers, Council members, and Staff from 1911 to 2011, and the top Visual, CCD, PEP, and Photographic/Photovisual observers. For more information go to: <http://www.aavso.org/aavso-100th-anniversary-commemorative-posters>

or use this link:

<http://tinyurl.com/cge9t9s>

## THE AAVSO WALTER A. FEIBELMAN SUITE

The Feibelman Suite at AAVSO Headquarters is available to guests who are in the Boston/Cambridge area to perform an AAVSO-related task, that is, the purpose of their visit is to do something for or related to the AAVSO. For details about the suite or making a reservation, please visit

<http://www.aavso.org/walter-feibelman-guest-suite>.



*See the following pages for important information about membership renewals and contributions.*

# JOIN THE AAVSO!

## AAVSO 2014 New Member Form

Please send application, first year's dues, and application fee to:

AAVSO, 49 Bay State Road  
Cambridge, MA 02138, USA

Date: \_\_\_\_\_  
 Full Name: \_\_\_\_\_  
 Full Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Telephone 1: \_\_\_\_\_ Telephone 2: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_  
 Birth Date: \_\_\_\_\_ Vocation: \_\_\_\_\_  
 Telescopic Equipment: \_\_\_\_\_  
 \_\_\_\_\_  
 Astronomical Experience (if any): \_\_\_\_\_  
 \_\_\_\_\_  
 How did you learn about the AAVSO? \_\_\_\_\_

### Types of Membership Offered and Dues

Annual:	Adult	US \$75.00 per year
	Associate (Under 21)/Pension/Limited Income	US \$37.50 per year
Sustaining:		US \$150.00 per year
Developing country <sup>†</sup>	(for members residing in low income countries):	US \$25.00 per year

Membership is prorated through the end of the year, starting with the current month.

**All applicants also add a one-time, \$10.00 application fee.**

Please consult the following table to find out how much to pay, including application fee.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept*	Oct*	Nov*	Dec*
Annual	\$75.00	\$68.75	\$62.50	\$56.25	\$50.00	\$43.75	\$37.50	\$31.25	\$100.00	\$93.75	\$87.50	\$81.25
A/P/LI	\$37.50	\$34.38	\$31.25	\$28.13	\$25.00	\$21.88	\$18.75	\$15.63	\$50.00	\$46.88	\$43.75	\$40.63
Sustaining	\$150.00	\$137.50	\$125.00	\$112.50	\$100.00	\$87.50	\$75.00	\$62.50	\$200.00	\$187.50	\$175.00	\$162.50
Developing Country <sup>†</sup>	\$25.00	\$22.92	\$20.83	\$18.75	\$16.67	\$14.58	\$12.50	\$10.42	\$33.33	\$31.25	\$29.17	\$27.08

\*Please note that if joining in September-December, the following year's dues are already being collected, so we request that you pay for the end of this year and for the following year.

<sup>†</sup>Developing countries EXCLUDE Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Korean Republic, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, the United States.

**Dues (see chart):** US \$ \_\_\_\_\_ **Application fee:** US \$ 10 \_\_\_\_\_

**Donation (optional):** US \$ \_\_\_\_\_ to \_\_\_\_\_ fund (see box on right)

**Total payment (dues + fee + donation):** US \$ \_\_\_\_\_

Contributions (see last page for descriptions):	
AAVSO General Fund	\$ _____
The Endowment Fund	\$ _____
Annual Campaign Fund	\$ _____
Building Fund	\$ _____
Janet A. Mattei Research Fellowship	\$ _____
Margaret Mayall Assistantship Fund	\$ _____
Solar Fund	\$ _____
AAVSONet Fund	\$ _____
Member Sponsorship Fund	\$ _____
Student Meeting Scholarship Fund	\$ _____
Contributor-Specified Restricted Funds	\$ _____

\_\_\_\_\_ I have enclosed a check / money order \_\_\_\_\_ Please charge my credit card (Visa or Mastercard)

Credit card #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Security Code (on back of card): \_\_\_\_\_

Cardholder's Name (as on card): \_\_\_\_\_

Billing address (if different from above): \_\_\_\_\_

Signature: \_\_\_\_\_

# 2014 MEMBERSHIP RENEWAL

On this page is a copy of the AAVSO membership renewal form for 2014. You may also renew your membership online. Safe and secure online payments are possible by visiting <http://www.aavso.org/membership-renew>. If your postal or email address has changed, please also take a minute to update your personal profile online. Simply click "User login" at the upper right of the home page, then go to "My account." In addition to your dues, your contributions to the AAVSO further support the organization's activities and are very much appreciated. Also, on the next page you will find descriptions of the various funds to which you may contribute. *Developing countries EXCLUDE Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, the Korean Republic, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, the United States.*



**AAVSO**  
**Membership and Subscriptions**  
 49 Bay State Rd  
 Cambridge, MA 02138-1203

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
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 Country \_\_\_\_\_

**Payment and Contact Information**

My **check** for \$ \_\_\_\_\_ is enclosed. *Checks must be in US funds and made payable to AAVSO.*

For payment by **credit card** please complete the section below. *All fields are required.*

\_\_ Visa \_\_ Mastercard Card Number \_\_\_\_\_ Exp Date: \_\_\_\_ / \_\_\_\_

Card Security Code (3-digit number on the back of your card): \_\_\_\_ Total to be charged: \$ \_\_\_\_\_

Name on card: \_\_\_\_\_ Signature: \_\_\_\_\_

**If the billing address for this credit card is different from your address above, please provide it here:**

Billing Address \_\_\_\_\_ City \_\_\_\_\_

State/Province \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_ Country \_\_\_\_\_

**Please make any changes necessary to correct and complete your membership contact information below:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_

Zip/Postal code: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**2014 Membership Dues Renewal Form**

**Membership Type** *(please check one)*

- Annual \$75     Sustaining \$150  
 Associate (under 21) \$37.50  
 Pension/Limited Income \$37.50  
 Developing Country \$25

**Contributions** *(see next page for descriptions)*

- |  |          |
|--|----------|
| AAVSO Building Fund                    | \$ _____ |
| Janet A. Mattei Research Fellowship    | \$ _____ |
| Margaret Mayall Assistantship          | \$ _____ |
| Solar Fund                             | \$ _____ |
| AAVSONet Fund                          | \$ _____ |
| Member Sponsorship Fund                | \$ _____ |
| AAVSO General Fund                     | \$ _____ |
| The Endowment Fund                     | \$ _____ |
| Contributor-Specified Restricted Funds | \$ _____ |

**TOTAL ENCLOSED** \$ \_\_\_\_\_

# SUPPORT THE AAVSO

In order to sustain the AAVSO and its operations, we rely on the generous support provided by members, sponsors, donors, and staff. Together we are the AAVSO. Your gift is a way for you to say that you believe in what we are doing and that you want it to continue moving forward. Every dollar given and membership purchased benefits the AAVSO in a necessary and unique way.

## AAVSO Funds

The following is a list of the specific funds to which you may contribute. If you do not wish to specify how you would like your donation to be used, the AAVSO will determine the fund where it is needed most and place it there.

**The General Fund** This fund is an unrestricted one and supports the general operations of the Association.

**The Endowment Fund** This is a professionally managed fund, invested for the perpetuity of the AAVSO. From time to time, transfers from this fund into the General Fund are made as necessary to meet operating deficits of the Association.

**The Building Fund** This fund is dedicated to replenishing the Endowment Fund for the cost of purchasing the new headquarters building (49 Bay State Road, Cambridge, MA 02138), to provide funds to refurbish the building, and to cover other costs incurred with the purchase.

**Janet A. Mattei Research Fellowship Program** This fund enables a visiting scientist, postdoctoral researcher, or student to perform research at AAVSO Headquarters with the goal of disseminating the results throughout the astronomical community.

**Margaret Mayall Assistantship Fund** This fund helps finance a summer student at AAVSO Headquarters who works on variable star-related projects and research while learning about the AAVSO and variable stars in general. Only the accumulated interest and not the principal may be used.

**Solar Fund** This fund helps to pay the staff costs of running the section, publishing the *Solar Bulletin*, and travel expenses for visiting solar researchers.

**AAVSONet Fund** This fund pays for refurbishment and maintenance of telescopes, cameras, mounts, computers, software, and hardware required to operate the AAVSO's robotic telescope network.

**Member Sponsorship Fund** Funds donated to this program pay the membership dues for those active variable star observers who want to become members of the Association but cannot afford the dues.

**Student Meeting Scholarship Fund** Donations to this fund pay for up to 10 student registrations per annual meeting of the AAVSO.

**Contributor-Specified Restricted Funds** These are gifts and contributions made to the Association for restricted purposes as specified by the donor thereof. All such restricted funds of the Association shall be administered in strict accordance with the instructions of the donor. The Association is not obliged to accept any assets so offered.

If you wish to contribute to one or more of these funds please fill in the amount on the appropriate line on your renewal form and include it in the total. *All contributions are tax-deductible in the USA.*

You may also donate online at: <http://www.aavso.org/support-aavso>

**Thank you for your support of the AAVSO!**