

H-A-D NEWS

Newsletter of the Historical Astronomy Division of the American Astronomical Society

Number 84 * April 2014

Meetings in Boston and Tucson

Jay M. Pasachoff, Williams College Joseph S. Tenn, Sonoma State University

The Historical Astronomy Division has met once or twice each year since 1981, as can be seen from the HAD website, which includes titles and links to abstracts of all papers presented and now has photos of speakers by session for recent meetings.

This year HAD is meeting three times: in January near Washington with the AAS and its High Energy Astrophysics Division (HEAD); in June in Boston with the AAS, its Solar Physics Division (SPD), and Laboratory Astrophysics Division (LAD); and in November in Tucson with the Division for Planetary Sciences (DPS).

HAD Chair Jay Pasachoff, the instigator of the additional meetings, has organized a special session on the history of solar physics to be held jointly by HAD and SPD in Boston. He writes:

I am pleased that we got excellent contributions. We will have seven papers about solar physics in a 90-minute special session Tuesday and three about other aspects of historical astronomy on Wednesday, as well as one solar-physics-related poster. Also, we can take advantage of propinquity to Harvard, since past-chair Sara Schechner has invited us to the Harvard Collection of Historic Scientific Instruments, where she is the curator. Those who join us will come by public transportation from the convention hotel to Harvard, where Sara will give a tour of the

collection. She says that "Highlights of the visit will include the very rare Geometrical and Military Compass invented by Galileo and given by him to a duke in 1604, astronomical instruments used by Harvard professors to observe the 1761 and 1769 Transits of Venus and 1780 solar eclipse from behind enemy lines, instruments purchased by Benjamin Franklin, grand orreries, astrolabes, pocket sundials, and much more."



The full schedule of papers with abstracts is available on the HAD website at http://had.aas.org/.

The following meeting will be in Tucson (http://aas.org/meetings/dps46) November 9-14. We will arrange to have a joint HAD/DPS session for contributed papers. I (JMP) will organize and chair the session; abstract submission on the AAS site opens on May 28. I'd be glad to hear in a preliminary way from you if you intend to offer a paper. Note that you can give a historical paper outside of your quota of one research paper.

jay.m.pasachoff@williams.edu

From the Chair

Jay M. Pasachoff, Williams College



In the fall newsletter, I wrote about the invited and contributed talks HAD held jointly with the AAS Division for Planetary Sciences at its meeting in Denver. I was glad to see over fifty attendees in our session, none of whom was a HAD member or who

usually attends the main January HAD sessions. So we succeeded in broadening our appeal. Of course, I suggested that it would be nice if they would join HAD. Additional details of our joint meeting this coming fall are on page 1.

Of course it was a pleasure for me to see so many of you at the Historical Astronomy Division sessions at the main AAS January meeting in National Harbor, Maryland, just outside Washington, DC. The minibanquet, organized by Vice Chair Marc Rothenberg, was well attended, though it forced us outside in brutally cold weather to walk the two blocks to the restaurant. I can guarantee that it will be warmer in Seattle in January 2015 when we have our sessions and minibanquet.

February marked Galileo's 450th birthday. On February 21, I was glad to participate in a birthday celebration at the University of California, San Diego, arranged by Brian Keating of the UCSD Center for Astrophysics & Space Sciences. The program of "Galileo and the Music of the Spheres" was held at the Arthur C. Clarke Center for Human Imagination and included five afternoon talks and, after an hour-long break, a concert of early music (by the Musicians in Ordinary from Toronto, including for this occasion a soprano and a lutenist) that included pieces by Galileo's father. of the sessions are online http://imagination.ucsd.edu/news/galileo-and-themusic-of-the-spheres/, and there are images at http://bit.ly/1gQoalt.

I talked especially about what Galileo reported in the *Sidereus Nuncius*. I also described the recent events dealing with the forged, supposedly signedby-Galileo *Sidereus Nuncius* discussed by Nicholas Schmidle in *The New Yorker* for December 16, an article that I think almost all readers of this newsletter will find very interesting.

May all your history be true and all your rare books be authentic.

jay.m.pasachoff@williams.edu

From the Vice Chair

Marc Rothenberg, National Science Foundation

It is the responsibility of the AAS Obituary Committee, chaired by the HAD Vice Chair, to procure obituaries of deceased AAS members. Originally, I thought the great challenge facing me as Vice Chair would be finding individuals to agree to write the obituaries. After a year at it, I have found I was only



partially correct. Sometimes it is difficult to find someone to volunteer. But it is equally difficult getting some of those volunteers to turn in their products. Go to the list of recently deceased AAS members on the AAS website. Look at the departed AAS members who do not have obituaries. In almost half the cases the obituary has been assigned, and we are waiting for the writer to submit it.

So I am making a plea. If you volunteered to write an obituary, especially if it was for someone who died before 2013, please get it in to me. If you have hesitated to turn it in because you believe a key fact is missing, please submit it anyway. Something is better than nothing. If you think you volunteered, but are not sure, please contact me to confirm your status. And if you have decided, for whatever reason, that you cannot produce the obituary, again, let me know. I will seek a new volunteer.

Speaking of new volunteers, I welcome them. If you see a name for whom you would like to contribute an obituary, please let me know. I am particularly concerned with clearing the backlog prior to 2013.

josephhenr@aol.com

From the Secretary-Treasurer

Joseph S. Tenn, Sonoma State University

Although the results are not yet visible, a small



group of us, the "AstroGen Team," has been working on developing the Astronomy Genealogy Project.

We have entered some 1800 astronomy-related dissertations into a temporary database, taking advantage of the fact that

many universities and some countries have posted such information—even the full dissertations—online. We are working on our list of nearly 2000 universities that have granted doctorates, and we are struggling with questions regarding what information to list when AstroGen takes its place on the AAS website in a format somewhat similar to that of the Mathematics Genealogy Project (http://genealogy.math.ndsu.nodak.edu/), which has more than 178,000 records.

We are looking for help. If you would like to become a member of the team, contributing as much or little time as you wish, please contact me.

joe.tenn@sonoma.edu



The HAD Oral History Initiative: Update

Jarita Holbrook, University of the Western Cape, Republic of South Africa

Gregory Good (pictured left) from the Neils Bohr Library of the American Institute of Physics joined HAD during the winter meeting for a workshop on oral history interviews. Dr. Good encouraged an informal discussion of doing oral history interviews. He spent some time addressing the concerns of participants, some of whom have already conducted a few interviews and some whom want to conduct interviews in the future. He shared some of the resources available on the website http://aip.org/history-programs/physics-history, where his contact information may also be found.

I presented an update on the HAD Oral History Project. Oral histories can take up more than six hours, which is a huge and frightening time commitment for some people. We have found that most people can and will commit to two hours with the caveat that depending upon how the interview goes we may need an additional two hours at another time. Thus far, our team has managed to stick to either the two hour or the four hour time limit. As we enter the second year of the project we are seeking new volunteers to conduct interviews. The newly formed 40+Emeritus group in particular is interested in having members of our project conduct interviews with its members. It has been a pleasure to find that we have so many people who are ready to be interviewed beyond the capacity of our current team. If you are interested in joining our team of interviewers please contact me.

astroholbrook@gmail.com

Future HAD Meetings

2014 June 3–4, Boston [with AAS, SPD, LAD]

2014 November 9–14, Tucson [with DPS]

2015 January 4–8, Seattle [with AAS, HEAD]

2016 January 3–7, Kissimmee (with AAS, HEAD)

Special Sessions Scheduled for January 2015 Meeting

The HAD Committee has approved three special sessions to be presented at the Seattle meeting (joint with AAS and HEAD) next January 4-5. This means that nearly all contributed papers will be on Tuesday, January 6. They are described by the session organizers on the next page:

The Impact of World War I on Astronomy and Other Sciences

organized by Virginia Trimble.

While WWII was the physicists' war (bombs, radar, ...), WWI was unquestionably the chemists' war (poison gases, of course, but probably more important, nitrogen fixation, synthetic rubber and petroleum, dyestuffs, antimicrobials, ...). Astronomy did not, however, escape unscathed, with damage to its people, physical and organizational infrastructure, and research. Examples include the death of Karl Schwarzschild, the razing of Lemaître's University of Louvain, the replacement of Hale's International Union for Co-operation in Solar Research by the International Astronomical Union, and part of the origin of enmity between Hubble and Shapley. And there are many others.

The centenaries of Sarajevo and The Guns of August are almost upon us, and I am organizing a Sunday afternoon HAD session called "The Impact of World War I on Astronomy and Other Sciences." The idea is one talk each on physics and chemistry and three on astronomy (one perhaps addressing the impact of WWII, since many of us may not still be around to mark its centenary).

The distinguished Yale historian of science Daniel Kevles has tentatively agreed to describe what happened in physics. I would very much like to hear from readers of this newsletter who might be interested in speaking at the session or who have suggestions on who should be asked to speak.

vtrimble@astro.umd.edu

Ideas of Evolution Inside and Outside of Astronomy during the Long 19th Century organized by Woody Sullivan.

This session will examine ideas of evolution and long-term change as they developed over the period ~1780-1910, especially as they originated and were cross-fertilized between the fields of astronomy, biology, geology, and physics. In astronomy, starting with the ideas of William Herschel on "maturation" of nebulae into stars and changes over time of the entire Milky Way (1780s), as well as the "Nebula Hypothesis" of Laplace for the formation of the solar system (1796), our systems of stars and planets

increasingly were looked upon as having a natural formation, a stable "middle age", and an eventual end. In physics new understanding of thermodynamics, led by William Thomson, produced the notion of a Universe inevitably running towards a "Heat Death" (1850s). In geology James Hutton (1780s) compared present rates of sedimentation and erosion with strata from the past and concluded that the Earth was far older than the Biblical 6000 years, "with no vestige of a beginning and no prospect of an end." These ideas were further developed by Charles Lyell (1830s), who greatly influenced Charles Darwin's ideas of evolution of species by natural selection (1859).

The session will examine the interactions and mutual influences over the 19th century of astronomy, biology, geology, and physics on the concept of change over time, its time scales and varying rates, and the inferred origins and eventual outcomes of the Earth and Cosmos.

The organizer will invite experts in the 19th century history of each of the involved disciplines, and also hopes to attract apt contributed talks of quality.

woody@astro.washington.edu

Preserving the Material Legacy of the American Observatory Movement

organized by David DeVorkin.

In 1967 David Musto coined the term "the American Observatory Movement" looking at the first half of the 19th Century. He chronicled the efforts of private individuals, colleges, and communities and explored the secondary role of the Federal government. This pattern changed little in the second half of the century, as the movement produced some of the largest and most powerful telescopes in the world, and continued to do so in the first half of the 20th as corporate philanthropy was added to the recipe. While the major institutions that grew out of this movement still thrive, their founding observatories have closed, are closing, or are threatened with closure. This special session examines the state of preservation of those observatories that established the world-wide dominance of the United States in observational astronomy and astrophysics, and explores the strategies their descendant institutions have chosen to preserve them.

DeVorkinD@si.edu

An Election Year for HAD

Peter Abrahams

The HAD Committee has appointed Jennifer Bartlett, Peter Abrahams, and Don Olson to be a Nominating Subcommittee to nominate candidates for election later this year. Elections will be held for Vice Chair and two at-large Committee Members, with terms beginning in January 2015. The person elected Vice Chair will serve for a total of six years: two as Vice Chair, two as Chair, and two as Past Chair. The Vice Chair is in charge of soliciting and editing the obituaries of all AAS members, and the Past Chair heads the HAD Prize Committee, which selects recipients of the Doggett Prize for lifetime achievement in historical astronomy and the Osterbrock Book Prize in alternate years. At-large Committee Members serve for two years. The requirements and duties of each position are described in the bylaws available on the HAD website at http://had.aas.org/bylaws/2010HADBylaws.pdf.

The website also contains a list of current Committee Members (http://had.aas.org/officers/) with a link to a list of past officers. Members are encouraged to volunteer or suggest potential candidates for all three offices by contacting me. The Nominating Subcommittee will submit its report in July to allow the election to begin in August.

abrahams.peter@gmail.com

100th Anniversary of the H-R Diagram

Jay M. Pasachoff, Williams College

I asked the editor of *Sky & Telescope* a few months ago how the magazine was noting the 100th anniversary of the Hertzsprung-Russell diagram, and he hadn't noticed the event. So I have written an article about the history of the H-R diagram for the magazine. One of the sources I consulted was the wonderful biography of Russell by HAD member David DeVorkin, whom I also had the chance to consult in person at our National Harbor HAD meeting in January.

Russell first showed his diagram at a meeting in the last days of 1913, and published his report in three issues of *Nature* in April and May 1914, the anniversary we are celebrating. He published

similar information in *Popular Astronomy* a month later.

Hertzsprung had done some relevant work earlier than Russell, but hadn't a diagram in the same form. Also, he had looked at a couple of young galactic clusters, so his diagrams had only main sequences, and therefore looked very different from today's H-R diagram quite besides the different arrangement of axes. As DeVorkin describes it in his book and in person, Hertzsprung's name got added only in the 1940s, as the result of Gerard Kuiper badgering S. Chandrasekhar, the editor of *The Astrophysical Journal*.

My article, with many more details and with illustrations, is to appear in the June 2014 issue of *Sky & Telescope*.

jay.m.pasachoff@williams.edu

Waff Symposium Scheduled

Trudy E. Bell

A unique interdisciplinary symposium on history of astronomy and origins of baseball in memory of the late HAD member Craig B. Waff (1946–2012) will be held in Cincinnati June 27–29, 2014. Waff was an enthusiastic and prolific historian of both subjects as well as an editor of encyclopedias and

books.



Sponsored by the Antique Telescope Society, the Cincinnati Observatory Center, and the Vintage Base Ball Association, the symposium will feature two keynote speakers: our own Steven J. Dick, currently the

holder of the Baruch S. Blumberg NASA/Library of Congress Chair in Astrobiology, and John Thorn, the official historian of Major League Baseball. Participating historians of astronomy include HAD members Marc Rothenberg, Barbara Becker, and Robert W. Smith, as well as noted historians of baseball Leo Bradley, Greg Rhodes, and Robert Tholkes. More information may be found at http://www.webari.com/oldscope/atspages/waff2014.htm and also at http://trudyebell.com/CraigBWaff1946-2012.php.

t.e.bell@ieee.org



The Astronomy Legacy Project Michael Castelaz and Thurburn Barker Pisgah Astronomical Research Institute

On the campus of the non-profit Pisgah Astronomical Research Institute (PARI) located at a former NASA tracking station in western North Carolina is the Astronomical Photographic Data Archive. APDA (http://www.pari.edu/apda) was established in 2007 and is dedicated to collection. restoration, preservation and storage astronomical photographic data and tasked with establishing an Internet-accessible digital database of images. APDA is essential both for the health of astronomical science and for credibility of the current generation of astronomers as guardians of its unique heritage.

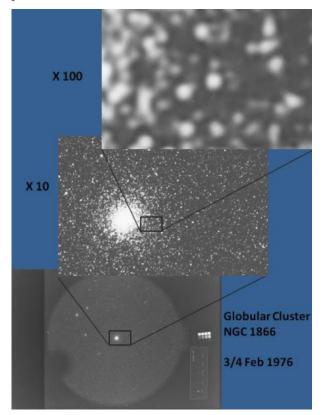
APDA now has more than 40 collections totaling 220,000 astronomical plates and films

dating back to 1898. The third largest collection of astronomical plates in the U.S. contains plates from the University of Michigan, Case Western Reserve University, Vanderbilt University, the U.S. Naval Observatory, Cerro Tololo Inter-American Observatory, McDonald Observatory, the Harvard-Smithsonian Center for Astrophysics, Maria Mitchell Observatory, the Mauna Loa Solar Observatory and many others.

There are numerous surveys. For example, in 1949-51 astronomer and future astronaut Karl Henize conducted a full southern survey with a 25-cm refractor at the Lamont-Hussey Observatory in Bloemfontein, South Africa. The figure at the top of this page shows APDA Director Thurburn Barker holding one of the Henize plates.

The key to access to these astronomical photographic data is digitization. The figure on the following page shows a plate digitized using a

commercial scanner. The plate was taken 3/4 February 1976 using the 4-m telescope at CTIO (plate#1677). The emulsion was IIaO with a GG385 filter. The image is saved in TIF format and is 108 MB in size. The camera used to take the image is a Nikon D800 with 36 megapixels and the lens is a Nikor 28-70 f/2.8 AFS ED Optics lens. The figure below shows the entire plate, then zoomed in twice to show detail. Variables, transients, and the ability to compare with other collections and modern observations can be pursued.



We have started the Astronomy Legacy Project (http://www.pari.edu/apda/alp), to digitize the extensive set of twentieth century photographic astronomical data housed at APDA and make it available to the twenty-first century digital world. Crowdfunding for the project raised the funds for a highly precise scanning machine and for administration of the scanning process with volunteers. Because of the wide range of types of plates and sizes of plates and emulsions among the more than 40 collections, digitizing them requires a versatile set of scanners and digitizing machines. The Astronomy Legacy Project will digitize the plates using the Epson Expression 11000XL used extensively by other observatories with large plate collections. In addition, one of the former STScI GAMMA machines now located in APDA, which is currently operational as a classic astrometric measuring machine using a photomultiplier tube, will be redesigned to use a camera, telecentric lens and LED light Panel. In this way, the 0.1-micron precision XY stage and camera/lens will allow very precise imaging and the ability to take small sections of plates and stitch those small images together. As the Astronomy Legacy Project gets underway, expertise and advice from the astronomical community is more than welcome.

mcastelaz@pari.edu

First Official 40+E Meeting Held

Lee Anne Willson, Iowa State University

At the January 2014 meeting of the AAS near Washington, DC, the first official gathering of 40-year and emeritus members (40+E) was held on Sunday evening, 6-7 PM. Over 65 people attended, overflowing the room. This initiative began with a much smaller gathering of just emeritus members in Anchorage in June 2012. It will continue as a regular feature of AAS meetings, although the time and format may yet evolve. At the minimum, there will be some arrangement for long-time members to meet and chat with old friends and colleagues in a quieter setting at every AAS meeting.

The AAS is interested in remaining relevant to its members as they transition into later career stages or new activities after retirement. The intent is that this will be a self-organizing group, with its initiatives and activities dictated by its members, and with minimal reliance on AAS resources. Two general directions that this group will likely take: Initiatives that serve members of the group, and ways in which this group can use its experience and wisdom to advance the profession.

There is significant overlap in membership between the 40+E group and those in HAD, and there are projects that can benefit from synergy between these groups, including the oral history project, the astronomy genealogy project, and building up files of material that can serve as resources for the Obituary Committee.

AAS President David Helfand appointed the following individuals to lead the formation of this group: Lee Anne Willson (Chair), Bruce Balick (member of Council), Jay Pasachoff (representing HAD), and Nancy Morrison.

lwillson@iastate.edu

Ruth S. Freitag Honored

Ruth Freitag is not a member of HAD, but before she retired from the Library of Congress she produced excellent bibliographies of the world's astronomy publications. Attached to HAD News from 1988 to 2001, they are now on the HAD website at http://had.aas.org/bibliographies/.

Last month, in celebration of Women's History Month, current Library of Congress Science Reference Section Head Constance Carter wrote about Ruth, whom she calls her mentor and inspiration. A brief excerpt follows:



Ruth Freitag in 1985

Ruth S. Freitag is a librarian who should be celebrated during Women's History Month. Admired by grateful scientists and writers from Isaac Asimov to Carl Sagan, Ruth was simply the best at unraveling a foreign citation, locating an arcane pamphlet or discovering an elusive fact. She immersed herself in the Library's collections, spent her vacations in the British Library and/or at university observatories throughout Europe, and delighted in compiling epic bibliographic guides and resources.

Her knowledge of German, Italian and other Romance languages was superb and her knowledge of astronomy, bibliography and biography encyclopedic. Her letters were bibliographical essays and used as models and guides by generations of young aspiring librarians. In 1965, her bibliographic expertise and knowledge were instrumental in shaping the MARC (Machine-Readable Catalog) format.

Freitag made her mark in the Library's Bibliography and Reference Correspondence Section. A stickler for accuracy and good form, she compiled correspondence and bibliographical style manuals to ensure excellence and consistency. She had the patience of Job and was a wonderful teacher, mentoring class after class of special recruits and staff. She freely shared her enthusiasm for the hunt—and the high that comes from finding just the right source to connect the correspondent's needs to the Library's collections. She received a wealth of mail from scholars and scientists, much of it foreign, and her assistance was acknowledged in innumerable books.

Read the rest at http://1.usa.gov/1kg9SvH.

More Stories About Astronomers

Helmut A. Abt, Kitt Peak National Observatory

(Ed. note: We continue the collection of stories begun in HAD News #82.

Frank Edmondson's Slides

Frank Edmondson was invited to the Greensteins' for dinner. Afterward he offered to show some of his Kodachrome slides. The first slide was of his wife Margaret standing in his front yard. The second was of her standing in the back yard. The third was her on the porch. And so on, and so on. After 15 minutes of dead silence, Jesse Greenstein felt he had to say something, so he said, "Nice slides, Frank." Frank said, "You like them? I have 500 more in my car."

Olin Eggen and the Swede

While Olin Eggen was working at the Lick Observatory, they had an extended visit from a Swede. Because both of them kept night hours, the Swede got well acquainted with Olin. One day the Swede asked Olin, "Olin, is there a word in English that I can use when things don't go right in the dome?" Olin thought a minute, and then said, "Yes, but you should use it only when you are alone in the dome." The Swede agreed, so Olin told him that it was, "Oh, fudge." Later the Swede reported that the word worked well.

One evening both of them were at a dinner party, when Olin spilled his drink. He said, "Oh, fudge!" The Swede got so embarrassed for him that Olin had to explain what it meant.

HAD Loses Two Active Members

Joseph S. Tenn, Sonoma State University

Sadly, two active members of the Historical Astronomy Division died in December.



Carol Ambruster, 1944 – 2013

Carol M. Ambruster, at left in the above photo of the speakers in one of the contributed paper sessions in the 2010 HAD meeting, was found stabbed to death in her apartment in Philadelphia on 9 December. A handyman who had worked in her building was arrested and is facing trial.

Carol was a professor of astronomy and astrophysics at Villanova University from 1987 to 2011. Both before and after her retirement she did extensive research on the archaeoastronomy of the American Southwest, much of it with J. McKim Malville and Tony Hull.

A full obituary may be found at http://pennsylvania.obituaries.funeral.com/2013/12/17/carol-m-ambruster-69-retired-villanova-astronomy-professor/.

Presentations she authored or coauthored at HAD meetings included "The Sun and Moon over Chimney Rock" (1989), "The Archaeoastronomy of Casa Rinconada: A Review and Some New Results" (1992), "Criteria for the Attribution of Intent to Archaeoastronomical Alignments: An Example in Chaco Canyon, NM" (2010), "Use of Monte Carlo Methods for Evaluating Probability Positives in Archaeoastronomy False Alignments" (2012), and, posthumously, "East, West, North, South: A Look at a Method Available to Prehistoric Cultures to Both Determine Cardinality and the Date of the Equinox" (2014). She discussed this last paper with coauthor Hull just hours before her death.



Richard Jarrell, 1946 – 2013

Richard A. Jarrell, standing at left in the above photo of the speakers in the 2010 HAD Special Session on The First Century of Astronomical Spectroscopy, died suddenly on 28 December.

Rich was professor of natural science and interim program coordinator of the Science & Technology Studies Program at York University in Toronto. An American by birth, Rich stayed in Canada after earning his Ph.D. at the University of Toronto in 1972, spending his entire career at York as a very successful teacher and scholar.

There he became the leading authority on the history of astronomy in his adopted country, authoring *The Cold Light of Dawn: A History of Canadian Astronomy* in 1988, and editing and writing many more books and papers on Canadian science and technology. He cofounded the Canadian Science and Technology Historical Association and was an editor of the *Biographical Encyclopedia of Astronomers*.

A full obituary appears at http://cstha-ahstc.ca/tag/richard-adrian-jarrell/ and there will be one on the AAS website, but here I want to mention Rich's contributions to HAD. He served on the HAD Committee from 2011 to 2013, and he presented five papers in HAD sessions. He was among the strongest contributors to the forthcoming Astronomy Genealogy Project. His good ideas and wisdom are greatly missed by those of us working on it.

Thank You, Donors

Joseph S. Tenn, Sonoma State University

The Historical Astronomy Division is greatly dependent on donations. The LeRoy E. Doggett Prize for Historical Astronomy and Donald E. Osterbrock Book Prize for Historical Astronomy are funded entirely by generous supporters.

Thank you to Brenda and Tom Corbin, Donald Davis, David H. DeVorkin, Arnold M. Heiser, Marie R. Lukac, Wayne Osborn, Jay M. Pasachoff, Kenneth S. Rumstay, Donald Yeomans, and Michael Zeilik for donating \$25 or more to the HAD fund in 2013. Donations totaled \$1070. Your donations will help HAD continue to provide exciting meetings with grants to speakers and graduate students.

Thank you to Daniel K. Brocious, Brenda and Tom Corbin, David H. DeVorkin, Martin Harwit, Marie R. Lukac, Jay M. Pasachoff, Kenneth S. Rumstay, Richard A. Wade, and Thomas R. Williams for donating \$25 or more to the Doggett Prize Fund last year. A total of \$1298 was contributed to the fund.

The Osterbrock Prize Fund received donations of \$25 or more from Brenda and Tom Corbin, Reginald Dufour, Thomas R. English, Martin Harwit, David C. Jenner, Kenneth I. Kellermann, Jay M. Pasachoff, Jeffrey D. Rosendhal, Joseph S. Tenn, and Thomas R. Williams in 2013. Contributions totaled \$1548 for the year.

Thank you to all. Our long-term goal is to make each prize self-sustaining, with costs covered by interest. We are still a long way from this goal, but every bit helps.

joe.tenn@sonoma.edu

Minutes of HAD Business Meeting 6 January 2014, Washington, DC

I. The meeting was called to order by chair Jay Pasachoff.

The minutes of last year's meeting, available online in HAD News #82, were approved. Current (2013–15) officers were introduced. These were vice chair Marc Rothenberg, past chair Jarita Holbrook, secretary-treasurer Joe Tenn, and committee member Linda French. Committee member Wayne Orchiston was unable to attend.

II. Secretary-Treasurer's Report

The Secretary-Treasurer (Joe Tenn) reviewed the HAD website, which contains titles and links to abstracts of all papers presented at all HAD meetings, a complete set of HAD News, and links to all obituaries of AAS members published under HAD auspices. There is also a selection of links to important online sources for history of astronomy, historical photos of early AAS meetings, and more.

There was a summary of presentations at recent meetings and mention of forthcoming meetings. The HAD Committee decided not to try to meet with the IAU in summer 2015. Those present were invited to submit proposals for special sessions for future meetings. Membership data and prizes were reviewed, and a preliminary financial summary for the year 2013 was presented. While expenses exceeded income, investment values increased with the rising stock market, so the Division ended the year with slightly increased assets. Final audited totals for the year are posted below. It was pointed out that nearly one-fourth of HAD members have emeritus status.

III. Report of Ongoing HAD Activities

A. Seventh annual HAD minibanquet

The Vice Chair (Marc Rothenberg) provided information on the dinner that would take place that evening. No one froze on the two-block walk to the restaurant, although the low that night was 7°F.

B. Obituary Committee

The Vice Chair described the task of preparing obituaries of all deceased AAS members. These now appear on the AAS website. Currently the easiest way to find them is to go to the list at http://had.aas.org/obits.html. Each year the HAD vice chair depends on members to inform him or her (usually via the AAS) of the demises of AAS members and seeks volunteers to write the obituaries. Marc also mentioned the difficulties in getting those who pledge to write obituaries to actually complete them. Volunteers are needed to write a number of obituaries. Jay Pasachoff mentioned that he had spoken to the 40+E group (see p. 7) the night before and encouraged members to presubmit CVs and other information to HAD or the AAS [they can be sent to Crystal Tinch (tinch@aas.org) or to hadsec@aas.org].

C. HAD Prize Committee

Prize Committee chair Jarita Holbrook announced that the recipient of the 2014 LeRoy E. Doggett Prize for Historical Astronomy, F. Richard Stephenson, would present the prize lecture in a plenary session to the AAS that afternoon, but it would be presented on video as he was unable to come from England to the meeting. Members were asked to nominate individuals for the Donald E. Osterbrock Book Prize by 1 March 2014.

D. The HAD Booth

Arnold Heiser solicited more volunteers to staff the booth, which was again inside the AAS area.

IV. Progress on New Initiatives

A. Oral History Interviews

Jarita Holbrook described substantial progress on this project, which is further discussed in her column on page 3.

B. Astronomy Genealogy Project

Joe Tenn presented information about this project, and solicited volunteers to join the AstroGen team. For more see p. 3.

V. Other

David DeVorkin described concerns about the imminent closing of historic observatories such as Lick. He had discussed it with the Working Group on the Preservation of Astronomical Heritage (WGPAH), which recommended a HAD Special Session on the topic for 2015. Brenda Corbin mentioned that IAU Commission 41 History of Astronomy is also considering the issue.

There was discussion of the status of the *ApJ* papers stored in Tucson. WGPAH is working on the problem.

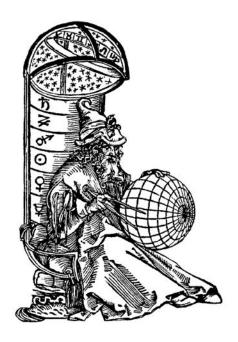
Theodore Gull announced that NASA Goddard Space Flight Center would soon advertise an opening for a historian to write the official history of the Hubble Space Telescope.

Jarita Holbrook announced that the next "Oxford" International Symposium on archaeoastronomy would be this year, perhaps in South Africa. [It was subsequently confirmed that it will be in Cape Town, 14-18 July, with our own Jarita Holbrook as cochair of the Scientific Organizing Committee. For more information see http://culturalastronomy.saao.ac.za].

joe.tenn@sonoma.edu

Treasurer's Report

| HAD Account | | |
|-----------------------|----------|-----------|
| BALANCE 12/31/12 | | 16,075.81 |
| Dues | 2082.50 | |
| Contributions | 1070.00 | |
| Interest | 498.75 | |
| TOTAL INCOME 2013 | | +3,651.25 |
| Speakers at meetings | -4161.03 | |
| Newsletter | -90.14 | |
| Recruitment | -45.73 | |
| AAS fees | -320.86 | |
| Affiliate member fees | -130.00 | |
| TOTAL EXPENSES 2013 | | -4,747.76 |
| INVESTMENT CHANGE | | +1,256.61 |
| BALANCE 12/31/13 | | 16,235.91 |
| Doggett Prize Fund | | |
| BALANCE 12/31/12 | | 31,243.02 |
| Contributions | 1298.00 | |
| Interest | 1031.94 | |
| TOTAL INCOME 2013 | | 2,329.94 |
| AAS fees | -25.96 | |
| TOTAL EXPENSES 2013 | | -25.96 |
| INVESTMENT CHANGE | | 2,600.00 |
| BALANCE 12/31/13 | | 36,147.00 |
| Osterbrock Prize Fi | und | |
| BALANCE 12/31/12 | | 15,763.48 |
| Contributions | 1548.00 | |
| Interest | 489.03 | |
| TOTAL INCOME | | +2,037.03 |
| Honorarium | -500.00 | |
| Recipients' travel | -1745.32 | |
| AAS fees | -165.68 | |
| TOTAL EXPENSES | | -2,411.00 |
| INVESTMENT CHANGE | | +1,232.11 |
| BALANCE 12/31/13 | | 16,621.62 |



Historical Astronomy Division of the American Astronomical Society

HAD News #84, April 2014, edited by Joe Tenn Please send contributions for the next issue, comments, etc. to joe.tenn@sonoma.edu. The deadline is always the equinox.

A complete version of this newsletter, with color photographs and active links, may be found on the HAD website at http://had.aas.org/.

Photo credits: P. 1: wallpapermaven.com. P. 2: J.M. Pasachoff.; M. Rothenberg. P. 3: E. Tenn; J.S. Tenn. P. 5: Trudy Bell. P. 6: PARI. P. 7: PARI. P. 8: Library of Congress. P. 9: J.S. Tenn.