

*** CAS ***

Charlottesville Astronomical Society Monthly Meeting



January 6, 2016

 *WELCOME!*

NEW MEMBERS AND GUESTS

- Gary Hart – New Member
- Guests: ???

Agenda

- **Welcome ~ New Members and Guests**
- **Guest Speaker, John Goss**
- **Club Business**
- **Member Activities – Observing Sites**
- **Member Activities – Club Observing**
- **Member Activities - Field Trips**
- **Member Activities – Mentoring, Training, and Certification**
- **Member Activities - Club Loaner Equipment**
- **Member Activities - Web Site**
- **Outreach Activities**
- **Comments and Questions?**
- **Door Prize Drawing**
- **Closing Thought**



Guest Speaker, John Goss

"Lunar Explorations, a Social Experience."



Fifteen years ago John Goss first became involved in the Astronomical League when he heard then League Vice-President, Bob Gent give a presentation about the League. Mr. Gent concluded by asking for volunteers to help the League with nurturing and developing amateur astronomy.

John quickly found himself elected as secretary to the Mid-East Region of the Astronomical League (MERAL). Since that pivotal day in October 2000, John either has served or is currently serving the League in many capacities: MERAL Chair, Reflector Advertising Representative, Reflector Editor, Dark Sky Advocate Program Administrator, Astronomical League Secretary, Astronomical League Vice President, and now Astronomical League President.

John Goss and his wife, Genevieve, live in Fincastle, VA and are members of the Roanoke Valley Astronomical Society and the International Dark-Sky Association. He teaches "Stargazing for the Curious Skywatcher" through Dabney Lancaster Community College, and writes an astronomy column for the Roanoke Times.



Club Business




Financial and Membership Status

a/o December 31, 2016

- CAS Checking Account Balance : \$4,827.94
- Uncleared Checks : 0
- Net Balance : \$4,827.94
- Petty Cash : \$112.00
- **Total CAS Cash Assets :** **\$4,939.94**
- **New Members:** **Gary Hart**
- CAS Memberships:
 - Individual 32
 - Family 13
 - Senior 34
 - Student/Military 2
 - Educators 6
 - # of Memberships 87
- **Total Members* 100** (**includes one additional person for each family membership*)

Michael Hegedus, CAS Treasurer
January 1, 2016

A stylized, low-poly mountain range graphic in shades of brown and tan, positioned at the bottom of the slide against a blue gradient background.

Annual Membership Dues

- \$25 Individual
- \$30 Family
- \$15 Senior (65 & Over)
- \$15 Student (up to age 22, enrolled in a school, college, or university)
- \$15 Active Duty Military
- \$15 Educators
- \$ 0 Science Educators (Free)
- **Note: Dues are payable as of January 1, 2016**
- Membership includes access to private and restricted observing sites, membership in the Astronomical League, and membership in the International Dark Sky Association
- Contact or email Michael Hegedus, CAS Treasurer ngc6705@comcast.net
- **iOptron** <http://www.ioptron.com/> - Now club members can save 5% off the regular price for a limited time (US and Canada only) when 5 or more members make purchases in the same week. Just type your club's name in the notes when ordering.



2016 CAS Organization

- **Officers (*elected and appointed*)**
 - Fritz Repich, President
 - Rich Drumm, Vice-President, (*advocate for CAS Member Observing activities*)
 - Larry Saunders, Secretary
 - Michael Hegedus, Treasurer
 - *Steve Layman, Director, Outreach (*advocate for CAS Outreach activities, events, and programs*)
 - *Ed Preston, Custodian, Club Equipment
 - *Marianne Kish, Director, Member Mentoring, Training, and Certification (*advocate for CAS Member mentoring, training, and certification*)
- **Executive Council**
 - Consists of the four elected officers and the three, at-large, appointed members

*** Appointed Office**



2016 Monthly Meeting Schedule

- **Jan 6, 2016, LMO** – John Goss, President, Astronomical League, “Lunar Explorations, a Social Experience”
- **Feb 3, 2016, NRAO Hdqts.** – Steve Layman, 2016 Heidi Winter Award Recipient
- **Mar 2, 2016, LMO** – Ed Preston, CAS Member, “The Cosmic Distance Ladder”
- **Apr 6, 2016, LMO** – Trey Wenger, UVA Graduate Student, Speaker
- **May 4, 2016, LMO** – Nicholas Troup, 4th Yr, UVA Grad Student, “Combing the Brown Dwarf Desert with APOGEE”
- **Jun 5, 2016, JMU** – CAS Family Day, Sunday - 2 PM, JMU’s John C. Wells Planetarium



2016 Social Events

- **JMU Planetarium Family Day 2-5 PM, Sunday, June 5, 2016**
- **Family Picnic-Star Party – to be scheduled for July or August 2016, 7-11 PM**
- **Christmas Party, Friday ??, 7-9 PM, December, 2016 to be scheduled for early December 2016**



Astronomical League Awards

- **Have you participated in any of the following?**
 - *Spring or Fall Fan Mountain Public night*
 - *Hollymead Elementary School Star Party*
 - *Ivy Creek Natural Area Public Nights*
 - *The Market at Grelen Star Party*
 - *Open Doors session*
 - *McCormick Observatory Group Nights, etc.*
- **Have you observed all of the Messier objects?**

If so,...you may be eligible for an Outreach Award!



Astronomical League (AL) Awards (*continued*)

- **AL Outreach Award Requirements**
 - *Five 2-hour outreach sessions*
 - *Document using an AL spreadsheet*
 - *Confirm with club officer*
- **AL Messier Object Observing, see:**
<https://www.astroleague.org/al/obsclubs/messier/mess.html>



Member Activities

Observing Sites



Six Local Observing Sites

- **Residential**
 - Rich Drumm's Farm
 - Susan Bender's Farm
 - John Avellone's Spontaneous Star Parties
- **Private**
 - Market at Grelen – (*Scott Duresky*)
- **Restricted**
 - Leander McCormick Observatory – (*Rich Drumm and Fritz Repich*)
 - Fan Mountain Observatory – (*Rich Drumm and Fritz Repich*)



Three Retreat Observing Sites

- **Fan Mountain** - *Rich Drumm coordinating*
- **Market at Grelen** – *Scott Duresky coordinating*
- **Bear Mountain** – *Scott Duresky coordinating*



Local Dark-Sky Observing Sites

- **Rich Drumm's Farm:** *Lombardi Observatory, Barboursville, North of Charlottesville*
- **Susan Bender's Farm:** *North Garden, South of Charlottesville*
- **John Avellone's Spontaneous Star Parties:** *Blue Ridge/Skyline Drive sites, Southwest of Charlottesville* (Whenever clear skies prevail, John announces observing opportunities, on short-notice, via CAS membership email broadcast messages – if you can make it, come on down and enjoy good community with John in the wee hours!)



Observing Site Directions

- **Rich Drumm's Farm** – Lombardi Observatory, 3140 Burnley Station Road, Barboursville, VA ~

Coming from Charlottesville, North on US 29, turn right at Burnley Station Road (shortly after Proffit Road), 3140 will be on the left – Leo's trailer (Lombardi Observatory will be in the field)

- **Susan Bender's Farm** - 3129 Old Lynchburg Road, North Garden, VA ~

Coming from Charlottesville, South on US 29, turn left at Rt 708, turn right at 4-way stop, go 1.9 miles and turn left into the driveway and pick your place in the field



Member Activities

Club Observing



January 2016 ~ “What’s Up”

- <https://youtu.be/2j5-rRiUNbU>



Observing Close to Home - The Moon

from

Bob Berman's "Strange Universe" column,
Astronomy Magazine, February 2016

- **What:** The First Quarter Moon
- **When:** Jan 16-19th, Feb 14-17th, Mar 15-18th, 6-10 PM
- **How:** Binoculars (15x-20x, tripod mounted/image-stabilized) or Telescope w/low power eyepiece
- **Where** (to start): At the curved mountain range almost in the middle – the Apennines, 400 miles long, 18,000 ft straight up (almost), ending abruptly at the crater Eratosthenes.
- **Why:** *Because it's there!*

“Two and three days after First Quarter, those curved Apennines and Eratosthenes together point you to the most beloved lunar crater, Copernicus.”



L-R: Copernicus, Eratosthenes, and the end of Apennine Mt. Range



Saturday, February 6th

Club Observing, 5 PM – 10 PM

Susan's Farm

New Moon

New Moon	First Quarter	Full Moon	Third Quarter
<i>Jan 9, Sat, 20:31</i>	<i>Jan 16, Sat, 18:27</i>	<i>Jan 23, Sat, 20:46</i>	Jan 31, Sun, 22:29
Feb 8, Mon 09:40	<i>Feb. 15 Mon. 02:47</i>	<i>Feb. 22 Mon. 13:20</i>	<i>Mar 1, Tues, 18:12</i>



Wednesday, February 17th

Club Observing, 5 PM – 10 PM

Rich's Farm

First Quarter Moon

New Moon	First Quarter	Full Moon	Third Quarter
<i>Jan 9, Sat, 20:31</i>	<i>Jan 16, Sat, 18:27</i>	<i>Jan 23, Sat, 20:46</i>	<i>Jan 31, Sun, 22:29</i>
<i>Feb 8, Mon 09:40</i>	Feb. 15 Mon. 02:47	<i>Feb. 22 Mon. 13:20</i>	<i>Mar 1, Tues, 18:12</i>



Retreats

- **How Many?** *2/Year*
- **When?** A weekend (Friday dusk to Sunday morning)
 - End of March (Messier Objects)
 - Early Fall (September or October)
- **Where?**
 - Fan Mountain - Rich Drumm
 - Staunton River State Park – Karl Stein
 - Market at Grelen – Scott Duresky
 - Bear Mountain – Scott Duresky (Combine with Field Trip to Green Bank – NRAO)



Member Activities

Field Trips



Field Trips

- **How Many?** *2-3/Year*
- **When?** A weekday in April, May, June, or September
- **Where?**
 - NASA Goddard (via Dave Rossetter's contact)???
 - NASA Wallops Island (via Dave Rossetter's contact)???
 - Johns Hopkins Applied Physics Lab (via previous contact)???
 - Orbital Sciences (via Marilyn Kozak's contact)
 - Green Bank, WV, NRAO (Via Fritz) – Combine with Retreat to Bear Mountain (coordinate w/Scott Duresky)



Member Activities

Mentoring, Training, and Certification



Mentoring and Training Status

- **Volunteer Mentors**
 - Steve Layman
 - Wes Epperly
 - Bill Phillips
 - Allan Mayer
 - Rich Drumm
 - Ed Preston
 - Scott Duresky
 - Karl Steoin
- **New/Existing Members desiring Mentoring**
 - Jane and Bill Clarke,
 - Carolyn Chionchio,
 - Ed Tourangeau, and
 - Any other members with telescopes sitting in a closet or garage
- **Next Step: Assign a Mentor to each Member**



Clarke 26" Refractor Training and Certification

- **CAS Member 26" Clarke Refractor Operator Re-Certification/Certification**
- **Formalized UVA Process (*subject to further review and modification*)**
 - Dr. Ed Murphy and/or Dr. Ricky Patterson will Provide “Recertification Training” to Certified CAS 26” operators and oversee CAS Candidate Operator Certification Training
 - Saturday Morning Certification/Recertification Indoctrination with Candidate CAS Member 26” Clarke Operators, CAS Trainer/Instructor Mentors, and Drs. Ed Murphy and Ricky Patterson
 - A CAS Mentor (Trainer/Instructor) will be Assigned to each CAS Candidate Operator for Several OJT Sessions
 - After Successful OJT Completion, Candidate Operator will Solo under Mentor Supervision at an Outreach Event



Member Activities

Club Loaner Equipment



Club Loaner Equipment

- Club Equipment Available for Member Check-out
- <http://cvilleastro.com/club-telescopes-available-for-club-member-use/>
- See Ed Preston for Information

Status to be provided at next meeting



Member Activities

Web Site



CAS Web Site Status

- **Many Members at Meeting Use Website**
- **Larry Saunders will conduct Course on Website Management to Interested Members**
- **Calendar Needs to be updated and Maintained (in process)**



Outreach Activities



Upcoming Events

- **Friday, January 8, 2016, 7-9PM** at LMO – 25-30 Cub Scouts, 10 Adults
- **Saturday, January 9, 2016** at JMRL-Northside, 10 AM – 1 PM: Astronomy presentation, literature/information table and solar observing (weather permitting)
- **Sunday, January 17, 2016 , 7-9PM** at LMO – Raleigh, NC BSA
- **Friday, January 22, 2016 , 7-9PM** at LMO – 20-25 LGMS Children, 3 Adults
- **Friday, January 29, 2016 , 7-9PM** at LMO – 5th Friday, Heidi's Night
- **February 5, 2016 , 7-10PM** 1st Fridays at Ivy Creek
- **February 20, 2016, 10AM-3PM**, Kid-Vention, Discovery Museum, Charlottesville - Solar observation (weather permitting) and literature/information table



Comments and Questions?



Door Prize Drawing

*You could be a
Winner! Did you
enter your name
for the door prize
drawing?*



Closing Thought

“There is a theory which states that if ever anyone discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable.

There is another theory which states that this has already happened.”

. . . Douglas Adams, 1952 - 2001

