

The Night Sky

The Newsletter of The Astronomy Club of Akron

Volume 39 Number 3

March 2017

Next Meeting: Friday - March 24, 2017 - 8:00 PM - New Franklin

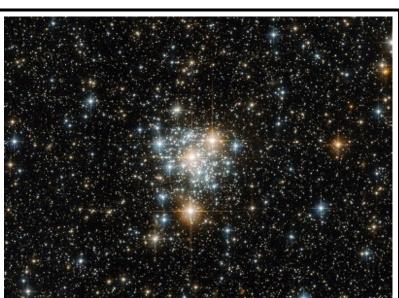
The Presidents Column

By Cathy Loboda

Every organization seeking longevity evaluates its purpose and structure on a regular basis. Such self-evaluation is essential in sustaining success in fulfilling purpose and the needs/interests of its membership.

The Night Sky, ACA's newsletter, is published monthly and contains information on upcoming meetings, observing sessions, and articles by members. In the past year, despite frequent invitations for member contributions, the newsletter has been lacking in articles written by and for our ACA members. This circumstance prompted discussion by ACA board members to reconsider its purpose and publication schedule.

After substantial discussion at the February 26th board meeting that revealed potential contributors felt their articles would not provide new or interesting information to colleagues, the decision



NGC 299 an open star cluster that is located in the Small Magellanic Cloud outside of our Milky Way galaxy. This beautiful cluster lies just under 200,000 light-years away. Image credit ESA/ Hubble & NASA.

was made to restructure the newsletter's purpose and publication schedule.

The ACA Bylaws do not address details surrounding The Night Sky specifically:

Article V, SECTION 10. Duties of the Publications Secretary.

The Publications Secretary shall be responsible for the editing, publishing and mailing of the club's newsletter, which includes the notification to members of all club meetings. In the event of the absence of a Publications Secretary the club's newsletter will not be published. Publication of the newsletter will resume upon the filling of the Publications Secretary position.

This eliminates the need to seek 2/3 membership vote to change the Bylaws; however, the board recognizes the importance of giving a voice to ACA members as change from the status quo is considered. At the March 24th membership meeting, as President I will ask for a motion from the floor allowing discussion and approval for change to The Night Sky.

Motion: To change The Night Sky to a quarterly newsletter with the purpose of informing and educating its readership on the subject of astronomy. The Night Sky quarterly publication dates: January, April, July, and October.

OFFICERS 2016 – 2018

OFFICERS 2016 - 2018	February Treas By Nick M
President Cathy Loboda	2/1/2017 Throu
Phone: 330-655-2923 E-mail: cnloboda@aol.com	
Vice President	Checking Beginning Bal
Dave Jessie Phone: 330-688-9043 E-mail: DJessie@neo.rr.com	Inco
Treasurer Nick Mihiylov Phone: E-mail: nmihiylov@aol.com	
Secretary Lew Snodgrass	Total Income
Phone: 330-867-4800 E-mail: CHRPLY@aol.com	Expe
Assistant Secretary/Treasurer Ann Ferrell Phone: 330-697-7279 E-mail: annhagemaster@gmail.com	Speaker Dinner - Reimbursement C #1212
Observatory Director	
Ron Kalinoski Phone: 330-837-5848	Total Expenses
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ACA Webmaster Dave Jessie	Checking Ending Balar
Phone: 330-688-9043 E-mail: DJessie@neo.rr.com	Sovingo Poginning Polo
Publications Secretary - Editor, Night Sky Newsletter Marissa Fanady Phone: 330-531-2443 E-mail: speedymissy@yahoo.com	Savings Beginning Bala Earned Interest
	Savings Ending Baland
Trustee Fred Huffman	
E-mail: trusstube2@gmail.com	Petty Cash Beginning Ba
Trustee	
Gregg Crenshaw E-mail: rigelstarman@gmail.com	Petty Cash Ending Bala
Trustee	Petty Cash
	Savings
Statutory Agent Mark Kochheiser	Checking
Phone: 330-882-3713 E-mail: mkochheiser@neo.rr.com	Grand Total

OTAA Representative Lou Poda

surer's Report Mihiylov ough 2/28/2017 \$1,768.57 alance ome

Total Income	\$0.00
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enses

-54.44

Check

Total Expenses Income Less Expenses Checking Ending Balance	-54.44 -\$54.44 \$1,714.13		
Savings Beginning Balance	\$2,566.20		
Earned Interest	0.04		
Savings Ending Balance	\$2,566.24		
Petty Cash Beginning Balance	\$50.00		
	0.00		
Petty Cash Ending Balance	\$50.00		
Petty Cash	50.00		
Savings	2,566.24		
Checking	1,714.13		
Grand Total	\$4,330.37		

Article by Nick Mihiylov ACA Treasurer.

SWAP & SHOP



FOR SALE:

Orion Sirius 40mm Plossl

Asking: \$25 **Contact: Glenn Cameron** Phone: 330-737-1472 Email: glenn@cameronclan.org

FOR SALE:



Teleview Radian 12 mm Eyepiece

Excellent

condition. Asking: \$180 (cash) **Contact: Fred Fry** Email: riverfry@gmail.com

FOR SALE:

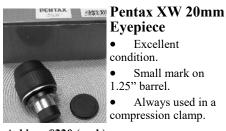
Celestron CPC Deluxe 800 HD Telescope with tripod.

Accessories:

- Celestron 1.25" eyepiece and filter kit.
- Tele Vue nebula filter.
- Celestron UHC/LPR filter.
- Celestron 15mm 1.25" 82 degree wide field eyepiece.
- Stellarvue 1.25" Dielectric Diagonal.
- Stellarvue 1.25" erecting prism.
- Celestron power tank and dew • shield.
- Astrozap sun filter.
- Celestron AC adapter.
- JMI custom hard shell case for telescope.
- All 8 months old, brand new condition.

Asking: \$2200 Contact: Jim Hall Phone: 330-268-8695

FOR SALE:



Asking: \$220 (cash) **Contact: Fred Fry** Email: riverfry@gmail.com

FOR SALE:

Celestron NexStar 8i computerized to go 8" F/10 Schmidt-Cassegrain

Focal length 2032 mm with 406x highest useful power. Includes:

- GPS module.
- Five multicoated Plössl eyepieces.
- 2X Barlow lense.
- Seven filters.
- A/C adaptor.
- Night vision flash.

Celestron star pointer. All rarely used and in new condition. Cost \$1,689 new.

Asking: Best Offer Contact: Nick Bade Email: nb@tribco.com Phone: 216-486-2000 weekdays and 440-585-8687 evenings and weekends.

Advertise in the Swap n Shop!

Send picture a of **ASTRONOMY** vour **RELATED** item and relevant information newsletter the to editor:

speedymissy@yahoo.com

FOR SALE:



Teleview Radian 18 mm Evepiece Excellent

condition. Asking: \$180 (cash)

The Presidents Column Con't

Rationale: This allows time for ACA members to contribute substantial articles with the intent to inform and/or educate readership. ACA has a large number of extremely knowledgeable astronomers who could write articles to educate and inform. Many ACA members, as well as those who read our newsletter through our website, would benefit from reading such articles.

In lieu of a monthly publication, ACA members will receive via email monthly ACA News and Notes.

Motion: ACA will publish via email the ACA News and Notes. The monthly publication will include club news, thank you memos, upcoming events, meeting minutes, and important information for members.

Rationale: The stress of producing the monthly newsletter without a pool of contributors is eliminated and the ACA News and Notes will be concise, informational for ACA members, and delivered in a timely fashion. If the membership so desires, the publication may also include the ACA sales/swap page.

In the spirit of self-evaluation and efficacy, please give this change thoughtful consideration and come to the March meeting prepared to share your thoughts and any concerns you may have.

Looking forward to a robust discussion.

Article By Cathy Loboda ACA President

ACA Meeting Minutes January 27, 2017

Venue: New Franklin City Hall.

Attendance: 19.

NOVA video: 8:05 "The Secrets of the Sun".

Break 8:58.

Business Meeting: Called to order at 9:10 by Cathy Laboda.

Secretary's Report: Lew Snodgrass read the minutes from January's meeting.

Dave Jessie: Out for health reasons (Get Well Soon) Dave.

Treasurer: Nick - Current balance: \$43330.33. Insurance due: \$475.00. Move to accept, approved by majority vote.

Spring Event: Discussion on Sat Fork excursion.

Observatory report: Ron, the 2017 Star party schedule will be coming out soon, our first Star party is on March 18th.

Good of the Order: Discussion on the upcoming eclipse, reminder of the upcoming Board meeting. ACA welcomes new member Lisa Gonzales. Reminder of Camp Carl on June 2nd.

Big thanks to Mike and Marnie Sanders for our delicious refreshments.

Meeting adjourned: 9:25.

Lew Snodgrass ACA Secretary

March 24, 2017 - General Membership Meeting



Speaker: Jodi & Roy McCullough, President of the MVAS (Mahoning Valley Astronomical Society).

Presentation: "Chasing Eclipses, Getting Ready for 2017".

About our speaker: A total Solar Eclipse is coming your way...on August 21, 2017. Have you made your plans for this once-in-a-lifetime experience? Even though it's over four months away, this rare American celestial event will sweep the nation from the Pacific to the Atlantic. (Nearly everyone in the contiguous U.S.A. can reach this total solar eclipse within a one day's drive.).

On Friday, March 24, 2017, Jodi McCullough, President of the MVAS and eclipse-chaser will present "Chasing Eclipses, Getting Ready for 2017" Jodi and husband Roy will share their recent total solar eclipse experience in Svalbard Norway, March 20, 2015. She will also give us pointers on how best to prepare for nature's phenomena in 2017.

New Alternate Meeting Location!!!

New Franklin City Hall 5611 Manchester Road Akron, OH 44319

Please note that we ALWAYS encourage the public to attend ANY of our events, including meetings. Come and enjoy the lecture and talk to us about astronomy!

ACA Board Meeting Minutes February 26, 2017

In attendance: Ron, Lew, Marissa, Gregg, Nick, Anne & Cathy.

Call to Order: 2:10.

Discussions: Future meeting venues, March: New Franklin, April & May: Kiwanis Hall. What to do with surplus telescopes. It was decided to do an inventory first. Gregg Crenshaw will inventory ACA properties including the Mead 8". We will determine what to keep, what to sell at a later date. Also discussed, reminders of Camp Carl (June 2nd) and the ACA Salt Fork excursion April (22nd).

We spoke of insurance, do we have enough? Nick explained our current coverage level. No changes were recommended. Our current bill is coming due \$450.

Election of new officers will be next year.

Ron mentioned posting guidelines for star parties: No eating, no smoking, laser pointers used by (non-staff) and cell phones must be dark and muted.

Discussion on whether ACA (Marissa) should continue publishing a monthly newsletter. Or perhaps do a semi-monthly publication. Also, a news and notes publication could be issued monthly instead of a full publication. No firm determination on this point was made.

A call was made by Anne, to board members, to feel free to contribute any articles on a variety of topics relating to their expertise. An edited draft would be approved by the author before publishing.

Lew Snodgrass offered a color printer to Marissa for those who wish to get a hard copy of our newsletter.

Call for adjournment: 3:15, all voted Yes.

Coursera's Astronomy: Exploring Space and Time

By Nick Mihiylov



Our hobby is ever changing and expanding with new discoveries being made almost on a daily basis. If you have an interest in learning as much about astronomy as you can, and your curiosity is not being completely satisfied in just the information you are getting from the publications such as Sky and Telescope and Astronomy, might I suggest enrolling in an online college course through Coursera. Several months ago, I learned about Coursera's Astronomy: Exploring Space and Time course through a posting on one of the Cloudy Night's forums and decided to research it a little further. In visiting the Coursera website at www.coursera.org I quickly learned that they offer quite a range of college level courses and most are at no cost, unless you wish to receive a certificate of completion... more on that later.

The course is offered by the University of Arizona and is presented by Chris Impey, University Distinguished Professor and Department Head of Astronomy for the university. He has been associated with this university for the past 30 years. After much internal debate regarding whether or not I was ready to commit to an 11-week astronomy course, I made the decision and enrolled in the course. I was happy to learn that this was an "On-Demand" course, there were no due dates and progress was at your own pace. This course was presented by Professor Impey in a very methodical and easy to follow format. Each week's lesson encompassed a number of related topics to the main theme for that week. There were video lectures supplemented by PowerPoint presentations. If you viewed the lecture on your computer as opposed to an iPad, you could follow the lecture with the transcript - I never did figure out how to see the transcript with my iPad! There were quizzes and a few "essay" questions that were then peer reviewed.

The course started out with Science and History where scientific methodology is discussed on through the Copernican Revolution. Other interesting weeks of note, not that all were not interesting, were; Tools of Astronomy where Adaptive Optics were discussed. This is how astronomers are able to cheat the atmosphere to realize the full potential of the large mirror telescopes. Another interesting module in this same week was on Interferometers, which is the technique for combining the light from multiple telescopes as if they were part of one large telescope. This is a technique that is routinely used in radio astronomy and now is increasingly being used in optical astronomy as well.

While I enjoyed all of the subject matter covered, the most interesting for me was week 10 which addressed Cosmology. The last week covered Life in the Universe. This ended up being addicting and I was able to finish the entire course in just over six weeks. I learned quite a bit more than I had originally thought that I would, and I very much enjoyed the challenge of learning as well as the process. I highly recommend this course for anyone wishing to learn more about the science of and about our chosen hobby. I enjoyed this experience so much that, yes..... I spent the \$48 so that I have the certificate of completion.

Article By Nick Mihiylov ACA Treasurer



ACA Eclipse Corner 2017

By Marnie Sanders

If you were among the members and guests who enjoyed the presentation of "The Secrets of the Sun" at the February 24th meeting, then you know how truly wondrous our Sun is and those who study it! Watch the "Nova" presentation of same title if you have not already seen it or perhaps view it again if you have.....All I can say is a very non-scientific "WOW"!

You will NOT, however, want to miss the next general ACA meeting March 24 when ACA welcomes the return of eclipse-chasers, Jodi and Roy McCullough, of the Mahoning Valley Astronomical Society, who will share their total solar eclipse experiences, including Sumatra Indonesia, as announced by our club VP, Anne Ferrell.

Opportunities for Solar Eclipse viewing are numerous and the Club officers and members will discuss and settle on who is going where and when and how to join if you are so interestedor as already mentioned, space (that is space here on earth....) may soon be filled! Locally, and as previously mentioned, Stow Astronomy club will likely be hosting an event (website www.stowastronomy.org); ACA will partner with the local Akron Library program (as mentioned last month) and Greg Crenshaw is further developing and finalizing that information and will still appreciate any club member/friends help.

And our friend at the Hoover-Price Planetarium, Dave Richards, who regularly contributes as a speaker for our club and with an astronomy article published on Saturdays in the Akron Beacon Journal, has announced the following event: "The Hoover-Price Planetarium will host an 'Eclipse Watch' on Monday, August 21 from 1:00 pm to 4:00 pm. At 2:30 that afternoon about 90% of the Sun's disk will be hidden behind the Moon, and specially equipped telescopes will be available for the public to witness this rare event. You would have to drive 6 hours west to Indiana to view the total eclipse; since you should never look at the Sun outside of the total phase of an eclipse, it is even more important that you have appropriate eye protection and telescopes here in Canton. Join us on the Monument Plaza that day to safely learn more about the Sun, the Moon and eclipses." For more information: www.mckinleymuseum.org.

And Freddy Huffman's destination, as mentioned in last months article, Barren River State Resort in Kentucky: speak with Mr. Whitney, telephone: 207-646-2151. Anne Ferrell has collected a variety of "out WEST" information and shared it for this article: Collette and Sky & Telescope tour: Denver and Cheyenne plus Solar Eclipse, Aug. 18-22, telephone: 1-877-277-1674 booking #764057: This is the Kelly Beatty tour, and more information is on the Sky & Telescope website. Jackson Hole Tour, Fiske Planetarium's Doug Duncan, Boulder, CO, via Cain Travel, telephone: 1-800-346-4747.

Once again and until the next time: Set the controls for the heart of the sun!

Article By ACA Member, Marnie Sanders

Astronomy Picture of The Month

By Marissa Fanady



scattered throughout the image along with instrument. beautiful glowing gases. Image credit ESA/Hubble & NASA.

Pictured here is a stunningly beautiful photo of a massive stellar nursery known as N159. This object is located in the Large Magellanic Cloud (LMC), a satellite companion just outside our Milky Way galaxy over 160,000 light years away. A stellar nursery is a collection of gas and dust clumping together by gravity to eventually form new stars. The Orion nebula, M42, is another such object and is easily visible with a telescope. These new young stars emit intense ultraviolet light that causes any hydrogen gas that's nearby to glow, this is exactly how neon lighting works. There's also extreme turbulent winds being produced by these stars which are carving out filaments, ridges, gaps and arcs in any surrounding material. This object lies just south of another massive star forming N159 a star forming region located in the Large region called the Tarantula Nebula. The image was taken by the Magellanic Cloud. New hot young stars are seen Hubble Space Telescope using its Advanced Camera for Surveys

> Article By Marissa Fanady ACA Publications Secretary

ACA NEWS AND NOTES

Meeting Location Change

Members please note that our April 28th and May 26th monthly meetings will be held at the Portage Lakes Kiwanis Civic Center, 725 Portage Lakes Drive, Akron 44319. Please check our website for map and directions.

April Meeting Refreshments

The ACA Board needs a volunteer to provide simple refreshments for our April monthly meeting. This break between speaker and membership meeting is a valuable time to chat with the speaker or friends as we refresh and build bonds. Contact President Cathy Loboda at cnloboda@aol.com to volunteer.

Spring Field Trip

Since the fall field trip to Salt Lake State Park for dark sky observing was canceled due to the weather, ACA members voted at the November meeting to reschedule Salt Fork as our spring field trip. The star party trip is scheduled for Saturday, April 29th. Mark your calendars now and hope for clear skies!

Eclipse 2017

Marnie Sanders is writing for the ACA newsletter about all things associated with the Solar Eclipse of August 2017. If you have plans for the event or other information you would like to share, feel free to contribute to Marnie's column. Let's create a club experience for Eclipse 2017!

Day Hour(UT)

March Astronomical Events

Day Hour(UT) 1 16 Uranus 4º N. of Moon 1 19 Mars 4° N. of Moon 2 03 Neptune in conjunction with Sun 2 14 Venus stationary 2 21 Ceres 0°.8 N. of Moon Occn. 3 08 Moon at perigee 5 03 Aldebaran 0°.2 S. of Moon Occn. **5 12 FIRST QUARTER** 7 00 Mercury in superior conjunction 7 03 Vesta stationary

- 10 23 Regulus 0°.8 N. of Moon Occn.
- 12 15 FULL MOON
- 14 20 Jupiter 2° S. of Moon
- 15 03 Pallas in conjunction with Sun
- 18 17 Moon at apogee
- 20 10 Equinox
- 20 10 Saturn 3° S. of Moon
- 20 16 LAST OUARTER
- 25 10 Venus in inferior conjunction
- 26 08 Neptune 0°.005 N. of Moon Occn.
- 28 03 NEW MOON
- 29 07 Mercury 7º N. of Moon
- 30 13 Mars 5° N. of Moon
- 30 13 Moon at perigee

1 09 Aldebaran 0° .3S. of Moon Occn. 1 10 Mercury greatest elong. E.(19°) **3 19 FIRST OUARTER** 6 05 Saturn stationary 7 05 Regulus 0° .7N. of Moon Occn. 7 22 Jupiter at opposition 10 01 Mercury stationary 10 21 Jupiter 2°S. of Moon 11 06 FULL MOON 13 00 Venus stationary 14 06 Uranus in conjunction with Sun 15 10 Moon at apogee 16 18 Saturn 3°S. of Moon **19 10 LAST OUARTER** 20 06 Mercury in inferior conjunction 20 21 Pluto stationary 22 20 Neptune 0° .2N. of Moon Occn. 23 18 Venus 5°N. of Moon 24 16 Pallas 0° .8S. of Moon Occn. 26 12 NEW MOON 27 16 Moon at perigee

April Astronomical Events

- 28 08 Mars 6°N. of Moon
- 28 18 Aldebaran 0° .5S. of Moon Occn.
- 30 04 Venus greatest illuminated extent

Information Credited, Her Majesty's Nautical Almanac Office, United Kingdom Hydrographic Office. US Naval Observatory.

Member Photos



This is a LRGB image of M109 taken at my home The camera is an ASI1600mmc on a Skywatcher MN190. Image by ACA member Robert Benedict.

The Night Sky Newsletter of the Astronomy Club of Akron c/o Marissa Fanady, Editor 443 Fernwood Ave. Tallmadge OH, 44278

The Astronomy Club of Aki c/o Nick Mihiylov	on			
13495 Mogadore Avenue NW	1			
Uniontown, Ohio 44685-9347				
Yes	I want to become a membe	er of the Astronomy	Club of Akron	
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NAME:		PHONE:		
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CITY:		STATE:	ZIP:	%
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ADULT (ages 18 a	and older) \$30.00	JUNIOR (age	es 12 to 17)	\$15.00
	Tmember \$15.00		BERSHIP	Charles and the
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