



The Night Sky

The Newsletter of
The Astronomy Club of Akron
www.acaoh.org

Volume 41 Number 4

April 2019

Next Meeting: Friday - April 26, 2019 - 8:00 PM - Kiwanis

ACA NEWS AND NOTES **APRIL 2019**

ACA Meetings

Our next ACA membership meeting is scheduled for 8:00 p.m. on Friday, April 26th at Portage Lakes Kiwanis Civic Center, 725 Portage Lakes Dr., Akron 44319. Our speaker, Dr. Geoffrey Landis, will present "NIAC: NASA Innovative Advanced Concepts." This program is designed to nurture visionary ideas that could transform future NASA missions. Hope to see you there!

ACA's 70th Anniversary

ACA is 70!!!! In celebration, the ACA Board is planning a year of special events. We have already placed our first order of commemorative T-shirts. Marnie Sanders will take paid orders for our second shipment at the April meeting. The shirts have either a colorful Hubble/Galaxy image or Armstrong's footprint on the moon image on front and the ACA anniversary logo on the back.

As we continue to celebrate our 70th Anniversary, ACA plans a "party bash" at our May 17th program.

On June 20th, in collaboration with the Summit County Public Library, ACA hosts NASA astronaut Mike Foreman for a special public event.

ACA is celebrating its anniversary along with the 50th anniversary of the lunar landing on July 20th. A full day of activities is planned for the whole family. Details are forthcoming.

August 4th is our Annual Members Picnic at Big Oaks Pavilion in Portage Lakes State Park. The picnic is scheduled for 3:00 p.m. ACA will provide the burger and dogs. Members attending will bring a dish to share. Please mark your calendars and join us!!

Star Parties

Star party season is here! Upcoming Star Parties are scheduled for April 27th at 8:30pm, and May 4th at 8:45pm. For details about what Observatory Director Ron Kalinoski has on the viewing list, see the 2019 Observatory Schedule found on the ACA website. Also check out the website often for notice of Impromptu Star Parties. Stop in at the ACA Observatory to support these outreach events!

(con't page 2)

The Astronomical League

It is the time of the year to either join or renew your membership to The Astronomical League. ACA's membership in the national league allows an ACA member to join for the annual fee of \$7.50. Joining gives the following benefits to members:

- Full voting privileges.
- The Reflector quarterly newsletter mailed directly to each member.
 - Liability insurance to protect the society and its officers.
- Book Service through which members can buy astronomy-related books at a 10% discount if not already sold through League Sales.
- Observing awards for members to work toward, promoting observing and the study of the sky.

If you are interested in joining/renewing, please bring your \$7.50 dues to any ACA meeting by the May membership meeting. Please make your check payable to ACA and note your check is for the Astronomical League. All clubs must turn in dues before July, so remember to bring your check to ACA's Astronomical League contact, Gregg Crenshaw.

ACA Outreach

ACA committed to participate in an outreach program at the Akron Public Library Main Branch on Saturday, June 22nd. Thanks to all who volunteered to represent the club! We are still in need of a few volunteers to help man the ACA table.

The program is scheduled between the hours of 10 am and 3:30 pm. Gregg Crenshaw will have a sign-up sheet at the April meeting if you are able to help.

April 26, 2019 - General Membership Meeting



Speaker: Dr. Geoffrey Landis, NASA Glenn.

Presentation: NIAC Talk: NASA Innovative Advanced Concepts. The NASA Innovative Advanced Concepts (NIAC) Program nurtures visionary ideas that could transform future NASA missions with the creation of radically better or entirely new aerospace concepts - while engaging America's innovators and entrepreneurs as partners in the journey. Dr. Geoffrey A. Landis will talk about the history of the NIAC program, and present some of the future mission concepts analyzed by the team at NASA Glenn as part of the NIAC program. Concepts will range from missions down to the surface of Venus, into the oceans of Titan, inward to the sun, and outward to the orbit of Neptune.

About The Speaker: Geoffrey Alan Landis (born May 28, 1955) is an American scientist, working for the National Aeronautics and Space Administration (NASA) on planetary exploration, interstellar propulsion, solar power and photovoltaics. He holds nine patents, primarily in the field of improvements to solar cells and photovoltaic devices and has given presentations and commentary on the possibilities for interstellar travel and construction of bases on the Moon, Mars, and Venus. Supported by his scientific background, Landis also writes hard science fiction. For these writings he has won a Nebula Award, two Hugo Awards, and a Locus Award, as well as two Rhysling Awards for his poetry. He contributes science articles to various academic publications.

Meeting Location:

Portage Lakes Kiwanis Civic Center
725 Portage Lakes Dr.
Akron 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!

OFFICERS 2018 – 2020

President

Cathy Loboda
Phone: 330-655-2923 E-mail: cnloboda@aol.com

Vice President

Justin Phillips
Phone: E-mail:

Treasurer

Nick Mihiylov
Phone: E-mail: nmihiylov@aol.com

Secretary

Terry Taylor
Phone: E-mail:

Assistant Secretary/Treasurer

Ann Ferrell
Phone: 330-697-7279 E-mail: annhagemaster@gmail.com

Observatory Director

Ron Kalinoski
Phone: 330-837-5848

ACA Webmaster

Dave Jessie
Phone: 330-688-9043 E-mail: DJessie@neo.rr.com

Publications Secretary - Editor, Night Sky Newsletter

Marissa Fanady
Phone: 330-531-2443 E-mail: speedymissy@yahoo.com

Trustee

Gregg Crenshaw
E-mail: rigelstarman@gmail.com

Trustee

Susan Swift
E-mail: swiftsm@windstream.net

Trustee

Connie Tighe
E-mail: contighe@hotmail.com

Statutory Agent

Mark Kochheiser
Phone: E-mail:

OTAA Representative

Lou Poda

March Treasurer's Report

By Nick Mihiylov

3/1/2019 Through 3/31/2019

Checking Beginning Balance	\$455.05
Income	
Memberships - family	40.00
T-Shirt & Astronomical League Deposits	688.94
Total Income	\$728.94
Expenses	
CK#1232 - Big Oaks Shelter Deposit - Reimbursement	-58.00
Speaker Dinner - March	-53.20
Total Expenses	-111.20
Income Less Expenses	\$617.74
Checking Ending Balance	\$1,072.79
<hr/>	
Savings Beginning Balance	\$2,567.20
Earned Interest	0.04
Savings Ending Balance	\$2,567.24
<hr/>	
Petty Cash Beginning Balance	\$50.00
	0.00
Petty Cash Ending Balance	\$50.00
<hr/>	
Petty Cash	50.00
Savings	2,567.24
Checking	1,072.79
Grand Total	\$3,689.99

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:



Televue Radian 12 mm Eyepiece

- Excellent condition.

Asking: \$180 (cash)

Contact: Fred Fry

Email:

riverfry@gmail.com

FOR SALE:



Televue Radian 18 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 adaptor.
- 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:



Pentax XW 20mm Eyepiece

- Excellent condition.
- Small mark on 1.25" barrel.
- Always used in a compression clamp.

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

speedymissy@yahoo.com

ACA Meeting Minutes March 22, 2019

Meeting called to order at 9:10 pm by Cathy Loboda.

Treasurer report presented by Nick Mihiylov: Checking \$93.05. Savings \$2,567.20. Petty Cash \$50.00. Total \$3,210.25.

Old Business – Cathy Loboda

Updates: Observatory Park/Nassau Station Trip– Cathy Loboda. April 13th – Dinner first, restaurant to TBA. Address – 10317 Clay Street Mountville, OH 44064.

Library Outreach – Greg Crenshaw. Telescope Seminar – Greg Crenshaw Cuyahoga Falls, July 17th. Summit County/Akron Library – Michelle McNeil. Partnership with ACA. Astronaut, Mike Foreman – Thursday, June 20th 7:00 pm. Library to pay for speaking fees. Portable Blow up Planetarium – Akron/Main Library Saturday, June 22nd , 10-4:00 pm. Library Lender Telescopes – Funding authorized to purchase.

Camp Ed Bear – Cathy Loboda May 31. Request for volunteers and their telescopes.

Brochure update – Justin Phillips.

T-Shirt orders – Marnie Sanders 3/22/19 order being placed, delivered at April meeting. Another ordering opportunity at the April meeting, delivered at May meeting. Size of logo decided on (largest of three selected). Review of available t-shirts.

Astronomical League – Gregg Crenshaw collected \$7.50 membership dues. Summit County.

Aultercare of Hartville – Ron between May 12th and 18th (Saturday through Friday). Looking for volunteers with telescopes.

Observatory Director's Report: Impromptu Star Parties – Saturday – 9/23/19. Recent Boy Scouts of Manchester Troup 119 this past month.

Experiences to share – None.

Questions to answer – None.

Ohio Turnpike Astronomical Association – Jodi and Roy McCullough. MVAS OTAA Event, August 24th 5 PM (Pot Luck Dinner a 6 PM). Address as recognized by GPS: 1076 State Highway 534, West Farmington, Ohio 44491.

Meetings for the next 2 months - Refreshments: Ann Ferrell – April meeting – 4/26/19. Marnie Sanders – May meeting – 5/17/2019. Location – Portage Lake Kiwanas Center. Speaker – Cathy Loboda. Lakewood Library – Dean Reagus.

Microsoft Office for Newsletter Publishing – discussion after the meeting – Dave Jessie/Cathy Loboda/Marissa Fanady/Susan Swift/ etc. March news provided by Cathy Loboda in a MS Word document – ACA March 2019 News and Notes. Need to purchase (subscribe) including MS Publisher so that Marissa can resume with the newsletter as usual for April. Purchase approved by the officers via email prior to the March meeting, but....Still trying to get status of ACA recategorized from sports/hobby/recreational club to non-profit (Tech-Soup/Microsoft) – Dave Jessie.

New Business: Anniversary of the lunar landing – July – Gregg Crenshaw.

Meeting Adjourned at 9:35 pm by Cathy Loboda.

Astronomical League News

By Gregg Crenshaw

Astronomical League (AL) dues should be paid by the May ACA membership meeting. This is the last ACA membership meeting before the 3-month summer break. See Nick Mihiylov, ACA Treasurer or Gregg Crenshaw, AL Correspondent, to pay your dues. Yearly dues are \$7.50. AL fiscal year is July 1 to June 30. All AL memberships run according to the AL fiscal year. The AL pro rates their dues according to when during the year someone joins. If you join for the entire League year, July 1 to June 30 you receive all four of the quarterly publications of REFLECTOR MAGAZINE both electronically as a pdf file and hard copy through USPS.

A benefit of membership is the national and regional conventions. The ACA is a member of the Great Lakes Region. This year's Great Lakes convention will take place concurrently with the Hidden Hollow Convention at Hidden Hollow Camp near Mansfield, Ohio, September 27-29. Hidden Hollow Camp is the home of Warren Rupp Observatory which houses a 36 inch F=6.8 Reflector telescope. Watch this space for more information.

ACA Non-Observatory Educational Outreach Programs

Monday, June 10 at 6:00 at Portage Lakes Library: HOW BIG IS THE SOLAR SYSTEM is a program for the whole family. We will be using NASA Night Sky educational tools to demonstrate the how big our corner of the galaxy really is.

Thursday, June 20 at 7:00 PM NASA Astronaut Mike Foreman will speak at Akron-Summit County Main Library Auditorium, 60 South High Street, Akron, Ohio 44326 in downtown Akron. This program is presented in partnership with the ACA. Learn what it's like to fly on a NASA space shuttle with someone who's been there - Navy Captain (Retired) Mike Foreman!

Saturday, June 22 10:00 AM to 4:00 PM: Astronomy Day at Akron-Summit County Main Library 60 South High Street, Akron, Ohio 44326 in downtown Akron. The ACA will have a display with club and educational information and telescopes. Look to the stars! Visit the inflatable planetarium provided by the Cleveland Museum of Natural History and check out other out-of-this-world activities throughout the day.

Saturday, June 29 3:00 PM Cuyahoga Falls Library: HOW BIG IS THE SOLAR SYSTEM is a program for the whole family. We will be using NASA Night Sky educational tools to demonstrate the how big our corner of the galaxy really is.

Wednesday, July 17 7:00 PM Cuyahoga Falls Library ALL ABOUT TELESCOPES: Refractor, Reflector, Schmidt-Cassegrain. These are the 3 basic types of telescopes. Buying a telescope can be a intimidating experience. We will look at each type (with examples) and discuss some of the pros and cons of each type.

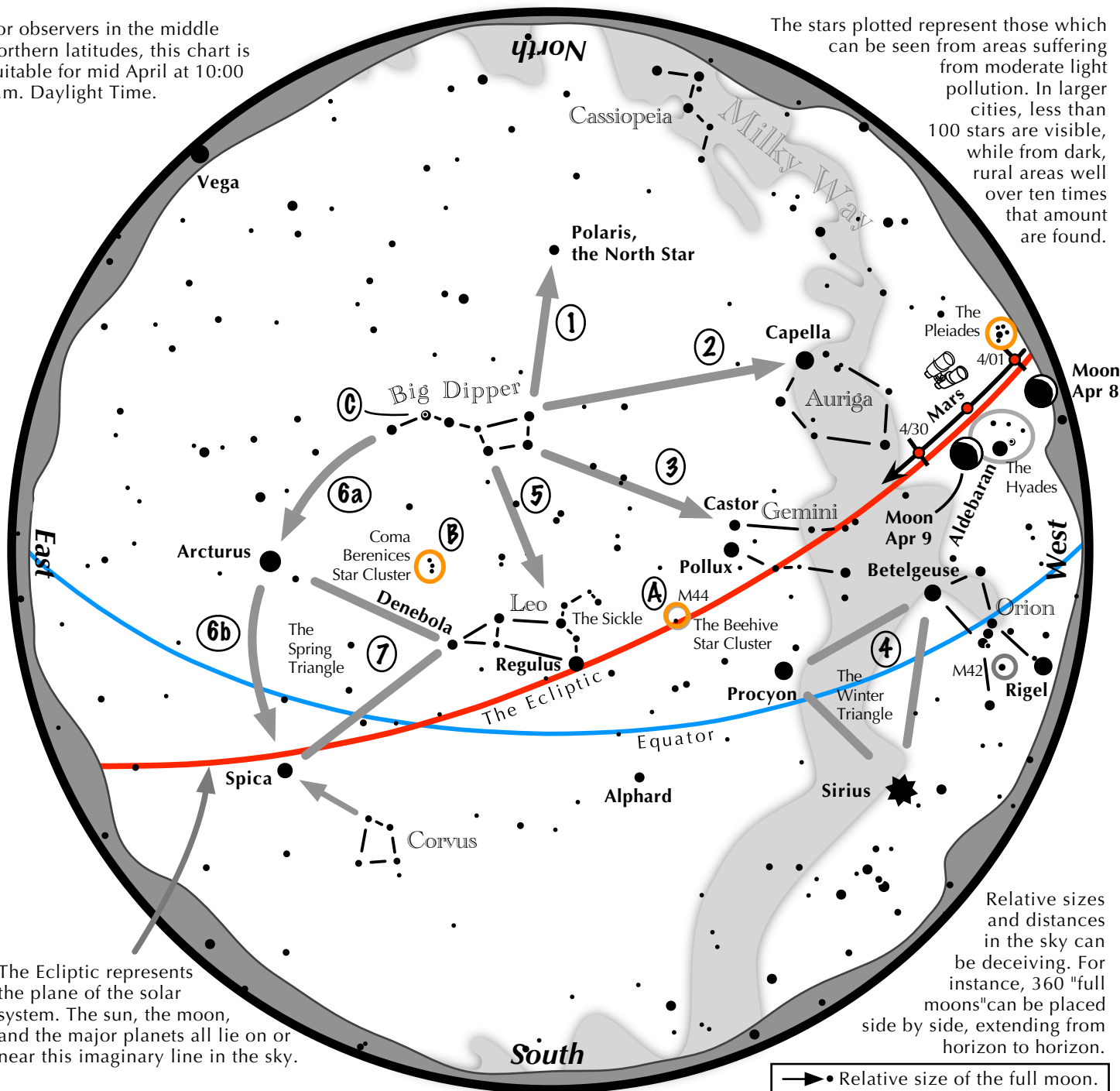
*All Articles By Gregg Crenshaw
ACA Trustee*



Navigating the April Night Sky, Northern Hemisphere

For observers in the middle northern latitudes, this chart is suitable for mid April at 10:00 p.m. Daylight Time.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→ • Relative size of the full moon.

Navigating the April night sky: Simply start with what you know or with what you can easily find.

- 1 Extend an imaginary line north from the two stars at the tip of the Big Dipper's bowl. It passes Polaris, the North Star.
- 2 Draw another imaginary line west across the top two stars of the Dipper's bowl. It strikes Capella low in the northwest.
- 3 Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
- 4 Look in the west-southwest for the bright Winter Triangle stars of Sirius, Procyon, and Betelgeuse.
- 5 Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
- 6 Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica.
- 7 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.

Binocular Highlights

- A: M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux.
- B: Look nearly overhead for the loose star cluster of Coma Berenices.
- C: In the Big Dipper's handle shines Mizar next to a dimmer star, Alcor.

Duplication allowed and encouraged for all free distribution.



Astronomical League
www.astroleague.org/outreach

Member Photos



Dave Hartsook gave a talk about telescopes to the Manchester Boy Scouts of Troop 118 on February 25th. About 50 scouts showed up to view the Great Orion Nebula, Pleiades, Herschel's Double Cluster, Eskimo Nebula, and open cluster M37 in Auriga. We also had a presentation on stars which included discussing the 1054 Supernova recorded by the Anasazi in a Chaco Canyon pictograph. Image by ACA member Ron Kalinoski.

The Night Sky

Newsletter of the Astronomy Club of Akron

c/o Marissa Fanady, Editor

1714 Toepfer Rd.

Akron OH, 44312

The Astronomy Club of Akron

c/o Nick Mihiylov

13495 Mogadore Avenue NW

Uniontown, Ohio 44685-9347

Yes! I want to become a member of the Astronomy Club of Akron

www.acaoh.org

(PLEASE PRINT)

NAME: _____ PHONE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EMAIL ADDRESS: _____

Astronomy Club of Akron annual memberships renew in the month of September.

ADULT (ages 18 and older) ___\$30.00

JUNIOR (ages 12 to 17) _____\$15.00

ADDITIONAL ADULT member ___\$15.00

FAMILY MEMBERSHIP _____\$40.00

Visit us on the Web at www.acaoh.org,