



The Night Sky

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

Volume 39 Number 1

January 2017

Next Meeting: Friday - January 27, 2017 - 8:00 PM - New Franklin

The Presidents Column

By Cathy Loboda

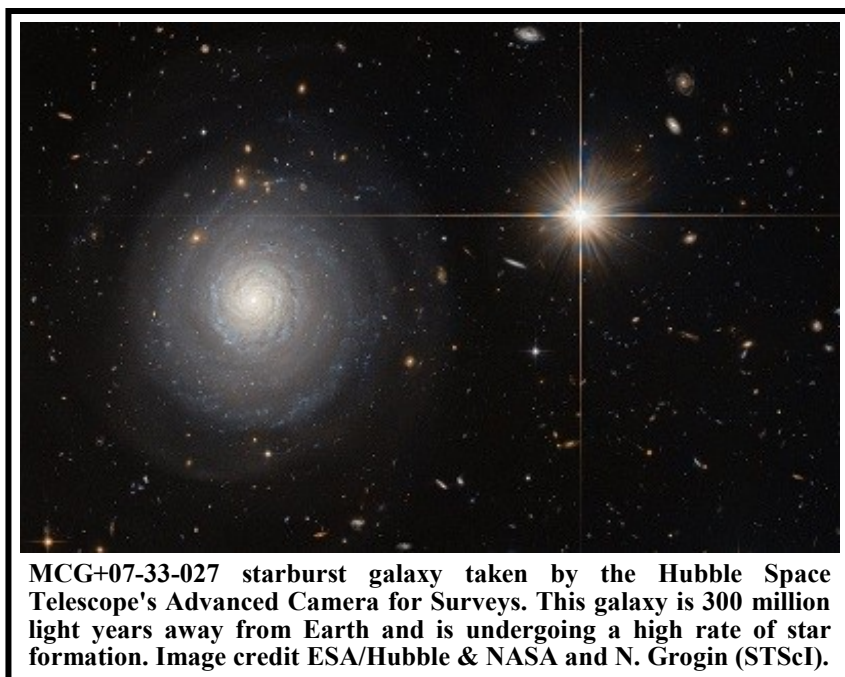
With the recent passing of astronaut John Glenn and the release of the movie *Hidden Figures*, my mind returns to memories of my middle school math class. The Cold War was raging and the Space Race was on. As I innocently sat near the back of the classroom, my teacher opened a corrugated box and pulled out yellow soft bound textbooks. As he walked between the rows giving each of us a book, he announced we were among the first to learn the “new” math and it was important to step up to the challenge as the U.S. prepared to exceed all Soviet accomplishments in space exploration.

I thumbed through the book’s pages. The print was that of a typewriter....and who gives out paperback textbooks!?! I read a few of the problems.....it was Greek to me. This was the beginning of my fall from grace in math and science. Even at that young age, I thought this instant switch was insane and sensed the stress of the times. As a former teacher, I can only imagine the anxiety of those who taught the subjects and the unstable times that required immediate curriculum change.

The somewhat recent push for strong STEM curricula is long overdue. Also overdue is the message that math and science has no gender or color preference. You may say I am of a certain generation and my concerns over such preferences are unfounded; yet the talk surrounding the release of *Hidden Figures* supports gender preference remains evident. As an academic advisor for a nearby college, I also see its existence.

This brings me to *Hidden Figures* and women like Katherine Johnson who worked behind the scenes for NASA. Nearly 98 years old, Johnson lived through historic times. Much like a “choose your ending” book that allows the reader to take different paths to the book’s conclusion, I think on how history would read without the sharp minds of Katherine Johnson and colleagues like Dorothy Vaughan and Mary Jackson who worked in the West Area of Langley Research Center in Virginia as computers. What track would our space exploration program have taken without such minds working behind the scenes?

The knowledge gained about space, the planets, and universe during the 1960s and beyond changed humanity. As members of an astronomy club, I think on how early ACA members shared the most current knowledge as it became available.



MCG+07-33-027 starburst galaxy taken by the Hubble Space Telescope's Advanced Camera for Surveys. This galaxy is 300 million light years away from Earth and is undergoing a high rate of star formation. Image credit ESA/Hubble & NASA and N. Grogin (STScI).

(con't page 5)

OFFICERS 2016 – 2018

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OTAA Representative

Lou Poda

November Treasurer's Report

By Nick Mihiylov

11/1/2016 Through 11/30/2016

Checking Beginning Balance	\$1,602.48
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Income

Membership Dues	125.09
-----------------	--------

Home School Group Donation	10.00
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Total Income	\$135.09
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Expenses

Speakers Dinner	-45.00
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Total Expenses	-45.00
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Income Less Expenses	-\$90.09
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Checking Ending Balance	\$1,692.57
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Savings Beginning Balance	\$2,566.08
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Earned Interest	0.04
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Savings Ending Balance	\$2,566.12
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Petty Cash Beginning Balance	\$50.00
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	0.00
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Petty Cash Ending Balance	\$50.00
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Petty Cash	50.00
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Savings	2,566.12
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Checking	1,692.57
----------	----------

Grand Total	\$4,308.69
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Article by Nick Mihiylov
ACA Treasurer.

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Lou Poda

December Treasurer's Report

By Nick Mihiylov

12/1/2016 Through 12/31/2016

Checking Beginning Balance	\$1,692.57
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Income

Membership Dues	40.00
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Astronomy Club	64.00
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Subscription & Membership Dues	
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Total Income	\$104.00
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Expenses

2 Astronomy Club subscriptions	-68.00
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Total Expenses	-68.00
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Income Less Expenses	-\$36.00
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Checking Ending Balance	\$1,728.57
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Savings Beginning Balance	\$2,566.12
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Earned Interest	0.04
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Savings Ending Balance	\$2,566.16
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Petty Cash Beginning Balance	\$50.00
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	0.00
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Petty Cash Ending Balance	\$50.00
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Petty Cash	50.00
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Savings	2,566.16
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Checking	1,728.57
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Grand Total	\$4,344.73
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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

The Presidents Column Con't

No less passionate about astronomy than ACA members today, how was the newest advances received? I am grateful I was of an age to understand the magnitude of accomplishments made during the early years of space exploration. I can still feel the excitement of family members as we gathered around a black and white TV to witness takeoffs to and touchdowns from space....and the amazing moment Neil Armstrong stepped onto the moon's surface. I also remember the sense of wonder that overwhelmed me as I looked through my brother's telescope for the first time many years ago.

May we all look back in gratitude for those who opened doors unimaginable and the flood of knowledge that ensued; and may we recall memories and feelings from our past to fuel our passion for astronomy as we serve the public of Akron and its surrounding communities in the upcoming year.

*Article By Cathy Loboda
ACA President*

Astronomy Picture of The Month

By Marissa Fanady



Earth and it's moon as seen from Mars by the Mars Reconnaissance Orbiter. Image credit NASA/JPL-Caltech/Univ. of Arizona.

well and combine the two images after processing to create one beautiful composite photograph. Both objects needed to be imaged separately in order to optimize the details and show surface features. With the moon being much smaller and more dim than Earth the object would be barely visible if it was shown at the same brightness scale as Earth. NASA maintained the correct positions and sizes of the two objects relative to each other. The moon appears closer to Earth than it actually is because the image was taken during a time when the moon was almost directly behind Earth from Mars' perspective. From this view of us from 127 million miles away we can see the dark seas on the moon as well as incredible features of oceans, clouds and land masses on Earth. Near the center of Earth one can clearly see the continent Australia. As we have used robotics to explore our solar system humans have been able to step back and take a good look at ourselves. Some of the more famous Earth photos are "Earthrise" from the Apollo 8 mission which was the first manned mission to orbit the moon and the "Pale Blue Dot" image captured by the Voyager 1 spacecraft looking back at us one last time from over 3 billion miles away!

Views of our home from thousands to billions of miles away always seems to capture us and remind us of how fragile, beautiful and rare our planet is in this vast hostile universe. Upon seeing this new image I couldn't help but imagine that we were looking at our very first picture of an exoplanet. As we dig deeper into our galaxy we are finding planets around almost every star that we observe. Better technology will enable humanity to one day locate and image an Earth like exoplanet in a nearby star system. Why would we want to find another Earth? Simple, nothing lasts forever....even our home will have an end. If we want our species to go on living then we must become space travelers and migrate to a new home. This image, to me, shows our future of exoplanet discovery, how future generations will get their first look at their new home. Until that wonderful day we should take Carl Sagan's words to heart..."to preserve and cherish the pale blue dot, the only home...we've ever know."

*Article by Marissa Fanady
ACA Publications Secretary*

ACA Meeting Minutes November 18, 2016

Venue: New Franklin City Hall.

Attendance: 26

Guest speaker: 8:01 Dr. J. Reynolds of Cleveland State University. Cleveland Astronomy Society. Program: "Dusk of Dawn" Dawn mission / New Horizons mission. Ended at 9:10.

Break 9:10 -9:16.

Business Meeting: Called to Order at 9:16 by Cathy Laboda.

Lew Snodgrass: read the minutes from Octobers meeting.

Dave Jessie: e-mail problems at a minimum.

Treasurer: Nick: Clubs Balance \$4208.56.

Thanks given to participants of the Mini Maker Fair volunteers. We had a great turn out.

ACA Club Dinner: (Freddy) Tentative date Feb. 5th , we need a more accurate head count.

Salt Fork-canceled-inclement weather.

Observatory report: Ron, The fence is up. Yeay!

Note: No meeting in December.

Congrats to Mark Kohieser on his upcoming wedding.

Meeting adjourned at 9:44.

Lew Snodgrass
ACA Secretary

January 27, 2017 - General Membership Meeting



Speaker: Dr. Geoffrey A. Landis, NASA Glenn Research Center

Presentation: TBA

About our 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.

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 Eclipse Corner 2017

By Marnie Sanders

Hello Solar Eclipse 2017 Fans!!

Well, it is not a sports event, but all sky watchers are certainly going to be "ALL IN" for this (in the words of our President-elect) H U G E event on August 21st! So, a few updates will be included in future newsletters as the event looms closer, and I invite any/all of you to "add on"!

Sky and Telescope is offering a reduced subscription price for the new year, coupled with several free "gifts", one of which is an eclipse special. Go to their website at www.skyandtelescope.com/magazine for more information.

EarthSky.org is a weekly newsletter (free) that I also enjoy and their Dec 29th edition had great info from their expert, Fred Espenak, aka "Mr. Eclipse". Go to their website at earthsky.org/astronomy-essentials/total-eclipse-of-sun-august-21-2017 for more information.

For those who would like to participate in a club viewing event for the "big day" in August, we will be discussing about coordinating an event in our upcoming meetings and via the newsletter, so collect your thoughts and share them!!!

And if good ole' reliable Ohio sends us her lovely cloud cover that day..... and some of us can't travel elsewhere, we may find a viewing event on screen somewhere. So, in the meantime, do what Pink Floyd tells us: Set the controls for the heart of the sun!

*Article By ACA Member,
Marnie Sanders*

January Astronomical Events

Day Hour(UT)

1 07 Mars 0°.02 S. of Neptune
2 09 Venus 1°.9 S. of Moon
3 04 Neptune 0°.4 S. of Moon Occn.
3 07 Mars 0°.2 S. of Moon Occn.
4 14 Earth at perihelion
5 20 FIRST QUARTER
6 02 Uranus 3° N. of Moon
7 07 Pluto in conjunction with Sun
8 10 Mercury stationary
9 15 Aldebaran 0°.4 S. of Moon Occn.
10 06 Moon at perigee
12 12 FULL MOON
12 13 Venus greatest elong. E. (47°)
13 02 Venus 0°.4 N. of Neptune
15 05 Regulus 0°.8 N. of Moon Occn.
18 01 Vesta at opposition
19 05 Jupiter 3° S. of Moon
19 10 Mercury greatest elong. W. (24°)
19 22 LAST QUARTER
20 21 Jupiter 4° N. of Spica
22 00 Moon at apogee
24 10 Saturn 4° S. of Moon
26 01 Mercury 4° S. of Moon
28 00 NEW MOON
30 11 Neptune 0°.2 S. of Moon Occn.
31 15 Venus 4° N. of Moon

February Astronomical Events

Day Hour(UT)

1 01 Mars 2° N. of Moon
2 08 Uranus 3° N. of Moon
3 02 Ceres 1°.0 S. of Moon Occn.
4 04 FIRST QUARTER
5 22 Aldebaran 0°.2 S. of Moon Occn.
6 14 Moon at perigee
6 19 Jupiter stationary
11 01 FULL MOON Penumbral Eclipse
11 14 Regulus 0°.8 N. of Moon Occn.
15 15 Jupiter 3° S. of Moon
17 07 Venus greatest illuminated extent
18 20 LAST QUARTER
18 21 Moon at apogee
20 23 Saturn 4° S. of Moon
23 16 Jupiter 4° N. of Spica
26 15 NEW MOON Eclipse
27 08 Mars 0°.6 N. of Uranus
28 20 Venus 10° N. of Moon

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

ACA NEWS AND NOTES

Mark Your Calendars

Our annual members' dinner is scheduled for the first weekend in February. Members will decide at our January 27th meeting between Saturday or Sunday and two establishments: Rose Villa of Portage Lakes and The Galaxy of Wadsworth. Menus can be found on each restaurant's website: <http://domenicsrosevilla.com> and <http://www.galaxyrestaurant.com>.

Meeting Refreshments

The ACA Board still needs two volunteers to provide simple refreshments for our spring monthly meetings. This break between speaker and membership meeting is a valuable time to chat with the speaker or friends as we refresh and build bonds. We need volunteers to commit to the April and May monthly meetings in order to cover our meeting calendar year. 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. Detailed information will be announced at meetings or in future newsletters.

Thank You

A special thank you goes out to Marnie Sanders for her contribution to the ACA newsletter. Marnie will focus on information concerning the Solar Eclipse that will take place in August. 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!

Member Photos



The Iris Nebula. 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 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,