

# The Night Sky

# The Newsletter of The Astronomy Club of Akron

www.acaoh.org

Volume 37 Number 9 September, 2015

Next Meeting: Friday - September 25, 2015 - 8:00 PM - Tudor House

# **Meteorite of The Month**

By Marissa Fanady

I have decided to try and throw something new into the newsletter to try and spice it up a bit, hopefully make folks get excited about receiving the next newsletter. As I am the club's foremost meteorite collector and having learned a lot about these amazing rocks from space I have decided to have a featured meteorite of the month in the newsletter. Each month I shall choose a meteorite, either from my personal collection or ones that I do not possess yet, and talk about it's history, composition, features, scientific value if any and anything special about the meteorite if any. I will also always leave my email address at the end of every article so that you may contact me If you have any further questions or if you would like to even purchase and/or start collecting meteorites of your very own. I know many trusted dealers who I personally buy from as well as being personal friends with so what you buy is a %100 guarantee. We observe space all the time but it's an even more treat to get to hold an object directly from space, created and shaped by the forces we see every night that we're out there loving our universe.

This month I've chosen a very common very widely known meteorite called Sikhote-Alin or SA as we call it for short. This meteorite is an iron meteorite classified as a IIAB meaning that it is composed of iron and nickel that crystallized from a melt. This meteorite is an observed fall from February 12, 1947 in Russia, the total amount of material found is about 23 tons. I find it funny how Russia got struck also in February on the 15th 2013 and the famous Tunguska event on June 30, 1908 that flattened trees in what's now Krasnoyarsk Krai Russia which was believed to be a large asteroid or comet. Now, I'm not saying that there's something special about Russia, that somehow the earth is creating a strong magnetic pull on meteoroids/asteroids over the country. Russia is however a vastly huge country so that makes this place a nice target that is bound to be hit more than once over a thousand years. The earth is hit A shrapnel piece of the Sikhote-Alin meteorite by debris from space every single day, it's just that the majority of the material is the size of a grain of sand. Completely harmless but it puts on a nice very brief light show. The main mass was estimated to be 1,000 a nice very brief light show. The main mass was estimated to be 1,000 approximately 50 grams. Image by tons but this is believed to be an overestimate, the mass was traveling at ACA member Marissa Fanady. about 14.5 km/sec. The mass exploded over the area before impacting the



from my personal collection. Note the sharp angular side(bottom left) and how it looks like it was ripped right off the main mass. It's

earth raining fragments everywhere, some were so big that they created impact pits when they landed. Some surface features of this iron and most iron meteorites include regmaglypts, flow lines, rollover lips and sharp angular features.

# **OFFICERS 2014 - 2016**

**President** 

Ann Ferrell

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

**Vice President** 

Phone: E-mail:

**Treasurer** 

Glenn Cameron

Phone: 330-737-1472 E-mail: glenn@cameronclan.org

Secretary

Lew Snodgrass

Phone: 330-867-4800 E-mail: CHRPLY@aol.com

**Assistant Secretary/Treasurer** 

Cathy Loboda

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

**Observatory Director** 

Ron Kalinoski

**Phone:** 330-837-5848

**ACA Webmaster** 

Dave Jessie

E-mail: DJessie@neo.rr.com

**Publications Secretary - Editor, Night Sky Newsletter** 

Jason Shinn

Phone: 330-685-5382 E-mail: jgshinn2014@gmail.com

**Trustee** 

Fred Huffman

E-mail: trusstube2@gmail.com

**Trustee** 

**Trustee** 

**Statutory Agent** 

Mark Kochheiser

Phone: 330-882-3713 E-mail: mkochheiser@neo.rr.com

**OTAA Representative** 

Lou Poda

# **August Treasurer's Report**

**By Glenn Cameron** 8/1/2015 Through 8/31/2015

Checking Beginning Balance	\$3,348.30
	, ,, , , , , ,
Income	
Dues	205.43
Weenie Roast	141.00
Total Income	\$346.43
Expenses	
Check for Observatory Expenses	-568.87
Total Expenses	-568.87
Income Less Expenses	-\$222.44
Checking Ending Balance	\$3,125.86
Savings Beginning Balance	\$2,580.45
Earned Interest	0.04
Savings Ending Balance	\$2,580.49
Petty Cash Beginning Balance	\$50.00
	0.00
Petty Cash Ending Balance	\$50.00
Petty Cash	50.00
Savings	2,580.49
Checking	3,125.86
Grand Total	\$5,756.35

Article by Glenn Cameron ACA Treasurer.

# SWAP & SHOP





# **FOR SALE:**

22mm Orion Epic ED-2 ED Eyepiece 25mm Orion Epic ED-2 ED Eyepiece

Asking: \$25 each

Contact: Glenn Cameron Phone: 330-737-1472

Email: glenn@cameronclan.org





# **FOR SALE:**

**Orion Sirius 40mm Plossl** 

Asking: \$25

Contact: Glenn Cameron Phone: 330-737-1472

Email: glenn@cameronclan.org

## **FOR SALE:**

## **Meade LXD75 Mount**

- Tripod.
- One counterweight.
- Autostar and battery box power supply.
- Cigarette lighter power cable.
- Selling because of upgrade to LX80 mount.
- LOCAL PICKUP is necessary.

Asking: \$325 OBO

Contact: Glenn Cameron Phone: 330-737-1472

Email: glenn@cameronclan.org

#### **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:**



# 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:**



# Teleview Radian 12 mm Eyepiece

• Excellent condition.

Asking: \$180 (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.

# **FOR SALE:**



# Teleview Radian 18 mm Evepiece

• Excellent condition.

Asking: \$180 (cash) Contact: Fred Fry

Email:

riverfry@gmail.com

#### FOR SALE:



15mm Ultra-Wide Angle Eyepiece

Asking: \$40

Contact: Lew Snodgrass Phone: 330-819-4886 Phone: 330-867-4800

Ask for Lew.

Email: chrply@aol.com

# Advertise in the Swap n Shop!

Send a picture of your ASTRONOMY RELATED item and relevant information to the newsletter editor: jgshinn2014@gmail.com

## Meteorite of The Month Con't



A complete individual from the Sikhote-Alin meteorite from my personal collection. Notice that this example is more rounded with thumb-prints or regmaglypts covering the leading edge. The reverse side has a nice rollover lip. Image by ACA member Marissa Fanady.

Article By ACA Member, Marissa Fanady

Only shrapnel pieces, fragments that got torn off of the mass during entry, are angular and have sharp edges where it was ripped off. Complete individuals can have regmaglypts, aka thumbprints, or be completely oriented and rounded if the mass remained in the same direction while falling to the earth. They can obtain flow lines where the meteor's surface was melted and the molten iron and nickel was blown back. If enough material flows back then the meteor will obtain a rollover lip. These features are rare and highly sought after by collectors. The internal structure of this meteorite contains the Widmanstatten pattern when etched and polished, most iron meteorites have this pattern. Etching is the process of using acid to cut into the unprotected parts of a metal surface to reveal a pattern in relief in the metal. These patterns are formed when interwoven bands of kamacite and taenite cool extremely slowly over about a thousand years by one degree Celsius! This creates a nice pattern of horizontal and vertical lines throughout the sliced, etched and polished meteorite. This feature is also highly desired by collectors making etched meteorites a bit expensive.

Well that's a lot of information to process! I hope that people can see why these objects are so amazing, only processes out in the harsh environment of space can create such amazing intricate material such as meteorites. We get an insight to the forces that shaped our solar system, that created our home. Without meteorites we wouldn't even exist. Studying meteorites can give us information on what solar systems we should look at when we try to find a new home. Scientists are now thinking that asteroids, not comets as they originally thought, delivered water as well as other organic materials to the young earth. We may even use an asteroid as a lifeboat to travel through interstellar space to other stars and solar systems! But for now, the main concern is to protect our planet from city sized killer asteroids and large, objects that are a few meters large and up. If you'd like to know more or obtain this meteorite feel free to email me at speedymissy@yahoo.com. Personally, there is nothing more amazing than looking up out there at our beautiful universe while also holding a direct descendent from the forces that we see out there, the connectivity experienced is unlike anything ever felt.

# **September Astronomical Events**

- 9/1/15 04 Neptune at opposition
- 9/1/15 16 Uranus 1 ° .1 N. of Moon Occn.
- 9/4/15 10 Mercury greatest elong. E. (27°)
- 9/5/15 06 Aldebaran 0°.5 S. of Moon Occn.
- 9/5/15 09 Venus stationary
- 9/5/15 10 LAST QUARTER
- 9/10/15 06 Venus 3° S. of Moon
- 9/10/15 23 Mars 5° N. of Moon
- 9/13/15 07 NEW MOON Eclipse
- 9/14/15 11 Moon at apogee
- 9/15/15 06 Mercury 5° S. of Moon
- 9/15/15 18 Ceres stationary
- 9/17/15 13 Mercury stationary
- 9/19/15 03 Saturn 3° S. of Moon
- 9/21/15 09 FIRST QUARTER
- 9/21/15 15 Venus greatest illuminated extent
- 9/23/15 08 Equinox
- 9/24/15 17 Mars 0°.8 N. of Regulus
- 9/24/15 19 Pluto stationary
- 9/26/15 10 Neptune 3° S. of Moon
- 9/27/15 04 Juno in conjunction with Sun
- 9/28/15 02 Moon at perigee
- 9/28/15 03 FULL MOON Eclipse
- 9/29/15 01 Uranus 1 ° .0 N. of Moon Occn.
- 9/29/15 03 Vesta at opposition
- 9/30/15 15 Mercury in inferior conjunction

Information Credited, Her Majesty's Nautical Almanac Office, United Kingdom Hydrographic Office

The Night Sky
Newsletter of the Astronomy Club of Akron
c/o Jason Shinn, Editor
1026C Rocky Brook Dr. Akron, OH 44313

The Astronomy Club of Akron c/o Glenn Cameron 8019 Glendevan St. NW Massillon, OH 44646-9018			
Yes! I want to become a mer	mber of the Astronon	ny Club of Akron	
<u>www.acaoh.org</u> (PLEASE PRINT)			
NAME:		PHONE:	
ADDRESS:			
CITY:	STATE:	ZIP:	
EMAIL ADDRESS:			
Astronomy Club of Akron annual memberships renew in the month of May.			
ADULT (ages 18 and older)\$30.00	JUNIOR (a	ges 12 to 17)\$15.00	
ADDITIONAL ADULT member\$15.00			
Visit us on the	Web at www.acaoh	ora	