



Club News

January, 2003

John Kocijanski, Editor

Jim McKeegan,	President
John Kocijanski,	Vice President
Brian Deis,	Secretary
Bud Wertheim,	Treasurer

The club would like to hold a few indoor meetings on Saturdays during the winter. We are looking for a place to hold them. We held a few meetings at Sullivan County Community College during weekdays but it would probably be more convenient for members if they were held on Saturdays. Members homes have been suggested as well as the Blue Horizon Diner in Monticello. Anyone else have any other suggestions?

The December 7th observation session was held at the home of Brian Deis just outside Chester, NY. Brian built an observatory and invited club members for a visit. The dome is fifteen feet in diameter and holds a Celestron C14. Despite some technical difficulties with the motor drive on the telescope we were able to observe a number of different objects including M1, M15, M31, M42, M76, M36, M37, M38, and Saturn.

Brian has a website (www.mrstarguy.com) that shows his observatory and its construction. Brian also sent this description of its construction.

Like many other amateur astronomers I started viewing the heavens with a cheap, small and unsteady telescope in my youth. Over the years my passion for astronomy grew as did the size and complexity of the telescopes I owned. It got to a point about twenty years ago that the instrument I used weighed in at three hundred pounds and took a good hour and a half to assemble, and much worse, an hour to disassemble, usually at two in the morning. Oh how I longed for a permanent building to house this monster.

Over the next twenty years many things prevented me from fulfilling this need, desire and dream of having an observatory. For to have this structure one must have some basic but necessary things. Money and good location are two. The most important was having a partner that understood this passion (obsession!) This was the toughest thing for me until I met Janet not too long ago. We married two years ago and

I have to say that without her love, understanding and patience I would not have been able to move the first shovel-full of soil.

A year and a half ago Janet and I planned to move to the country. We both wanted an out of suburbia life closer to the things we like to do. We settled on a house in Chester on three acres as a compromise and have loved living here, I think better then we even expected. Construction started on the Observatory at first Spring Thaw.

A tight budget necessitated that I do everything myself. This included digging with a pick and shovel the cubic yard of granite rock impregnated soil and placing the 500 pound steel pier in 2 ½ tons of concrete.

Once the pier was placed the 15' square deck sitting on four 12" diameter concrete piers was constructed around it. Then walls and a flat roof shaped to accept the 15' diameter dome was built.

Walls were finished with plywood, tarpaper and white vinyl siding. The roof was finished with plywood, tarpaper, aluminum sheeting and tar around the joint connecting the dome base.

The dome is a 15' diameter Pro Dome from Technical Innovations. It comes shipped in a box 9x8x6 weighing a ton! It took 40 hours to place the base ring on the roof and pre-assemble the four quadrants. Then, I was fortunate enough to have enough family and friends to help raise and bolt the quadrants and shutters to the dome one warm and sunny weekend.

I had enough materials left over to build some shelves and permanent tables inside. The floor was finished with indoor/outdoor carpet and rubber mats around the telescope. I also ran a 220 volt line from the main breaker of our house 200' away to give the building three separate power circuits. Since

I had already dug the ditch for the AC I also ran a phone line and separate DSL for the computer.

Currently installed in the Dome is a Celestron C-14 on a Meade mount made for my 7" refractor. The scope is a bit too heavy for the mount and I have on order a Meade 16' S.C. with fork mount. I hope to piggyback the 7" refractor to it later this year.

All told it took about 400 hours to build at a cost of almost \$20,000.00.

The Observatory at Chester was dedicated on November 9th to my father Louis J. Deis who taught me the skills of construction.

Images of the construction can be found on mrstarguy.com

Good Skies

Brian

So, today November 9, 2002

The Observatory at Chester is hereby dedicated to the memory of my father, Louis J. Deis, whose guidance, direction and quiet inspiration allowed me the opportunity to look up to the heavens, and imparted in me the knowledge to build this Structure.

Thank you

Brian Deis

The December 28th observation session was canceled due to poor weather. The January club observation sessions will be on the 4th and 28th starting at 7:30.

Mark Rosengarten emailed a set of instructions concerning how he made a pair of filters to be used with binoculars for solar observing.

So I returned my defective Binomites to Coronado and set upon a quest

to improve upon them. I purchased a pair of Orion Otter 10X28 water-proof binoculars (with twist up/down eyecups) with four extra objective caps. These are compact, roof-prism BAK-4's that Orion has on sale for \$109. They are exceptional in quality and the clarity of image fair takes my breath away. Here is what I did to make filters:

- 1) Take the endcaps and, using a hobby knife, cut a hole in the center of it to about $3/16$ from the edge.
- 2) Cut a washer out of paperboard (cardboard that is often used as backing, not corrugated) to fit the inside of the endcap and carve an equal size hole in the center of it.
- 3) Cut out two small squares from a sheet of Baader film (available from Astro-physics.com).
- 4) Apply superglue to one side of the washer and drop the washer gently onto the Baader film square. Press lightly on all sides.
- 5) With the washer still on top of the film, cut off thhe excess film from the edges with a hobby knife.
- 6) Apply silicone glue to the inside edge of the endcaps with a toothpick, careful not to get the glue too close to the opening.
- 7) Press the cardboard washer, film side down, into the endcap, using toothpicks instead of your finger to apply the pressure.
- 8) Apply the silicone glue around the edges of the cardboard washer with a toothpick, making sure to press it down between the spaces between the washer and the side of the endcap.
- 9) Use a toothpick to remove excess silicone glue from the cardboard washer and the sides of the endcap.
- 10) Let sit and cure for 24 hours.

I tried these filters out on this pair of binos right after putting them together, and they put the Binomites to shame. The filters are tiny. I will get a small plastic snap storage case to store them in and store the filters and binoculars in a compact camera case instead of the ones that shipped with the binoculars.

Mark

The club has selection of astronomy books, Stardate audio CDs, a Macintosh computer with astronomy software, and a Meade 8 inch reflector for members to borrow. Please contact John at 791-5240 or kocis@catskill.net if you are interested in borrowing any of these.

Astronomy News:

Here are some articles from various sources that might be of interest.

EMBARGOED UNTIL: 9:00 a.m. (EST) December 19, 2002

CONTACT:

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PRESS RELEASE NO.: STSci-PR02-16

A TINY GALAXY IS BORN

New detailed images from NASA's Hubble Space Telescope show a "late-blooming" galaxy, a small, distorted system of gas and stars that still appears to be in the process of development, even though most of its galactic cousins are believed to have started forming billions of years ago. Evidence of the galaxy's youthfulness can be seen in the burst of newborn stars and its disturbed shape. This evidence indicates that the galaxy, called POX 186, formed when two smaller clumps of gas and stars collided less than 100 million years ago (a relatively recent event in the universe's 13-billion-year history), triggering more star formation. Most

large galaxies, such as our Milky Way, are thought to have formed the bulk of their stars billions of years ago.

To see and read more about galaxy POX 186, please click on:

<http://hubblesite.org/news/2002/16> .

http://www.space.com/missionlaunches/lunar_impact_021214.html

Lunar Crash of 1953: Impact Crater Identified

By Leonard David space.com

14 December 2002

In 1956, an amateur astronomer — Leon H. Stuart — reported in the *Strolling Astronomer*, that he had observed and photographed a flash a few years earlier on the Moon. This event is the only unambiguous record of the crash of an asteroid-sized body onto the lunar surface.

Now, decades later, a study of lunar images snapped by the Clementine spacecraft as it orbited the Moon in 1994 has uncovered a candidate crater formed by the impact.

Eagle-eye scientists, Bonnie Buratti of NASA's Jet Propulsion Laboratory and Lane Johnson of Pomona College in Claremont, California have located a near mile across (1.5-kilometer) feature with a fresh-appearing ejecta blanket at the location of the flash. Spectral analysis of the crater, they report, reveals it to be bluer and fresher than other young craters.

Full story here:

http://www.space.com/missionlaunches/lunar_impact_021214.html

Mid Evening Observing Highlights for January

Jupiter and Saturn can be found in the eastern sky. Jupiter is in Cancer and Saturn is in Taurus. Gemini is rising in the east. Orion is prominent in the eastern sky. Below the three stars in Orion's belt the Orion Nebula (M42) can be seen. Auriga and Taurus are high in the sky. The bright star Aldebaran can be found in Taurus in the eastern part of the sky next to Saturn. The Andromeda Galaxy (M31) is in the western sky. The Great Square is setting in the western sky. The Double Cluster in Perseus can be found close to the zenith. The Milky Way stretches from the southeast to northwest. Full moon is on January 18th and new moon is on January 2nd. The Quatruid meteor shower will peak on the 3rd. The radiant for this shower is found just west of the Big Dipper's handle.

Here is some information about a comet that can be seen in the morning sky from the Sky and Telescope Skywatcher's Bulletin.

A COMET FOR CHRISTMAS

Comet Kudo-Fujikawa is currently about 7th magnitude, making it an easy binocular object for amateurs. It's moving through Hercules heading toward the Sun. It could be 6th magnitude or brighter by the year's end, and by mid-January it will be lost in the solar glare.

http://SkyandTelescope.com/news/current/article_816_1.asp

Observations and Photographs

If you are interested in submitting an observation or photograph please contact John at kocis@catskill.net.

Here are some photos taken by Bud Wertheim during the visit to Brian's observatory.



The moon over Brian's new dome



Nate on the ladder at the eyepiece of Brian's 14" Celestron



Brian at the telescope operating the declination control

BARLOW BOB'S CORNER

Barlow Bob is a member of the Rockland Astronomy Club.

THE PIZZA UNIVERSE

YOU MAY HAVE NOTICED THAT YOU SEE MORE STARS IN THE NIGHT SKY, DURING THE SUMMER AND WINTER. HOWEVER, YOU SEE FEWER STARS IN THE SPRING AND FALL. WHY DOES THIS OCCUR?

THINK OF OUR MILKY WAY GALAXY AS A GIANT PEPPERONI PIZZA. IN THE NIGHT SKY OF SUMMER AND WINTER, YOU ARE LOOKING ACROSS OUR GALAXY,

IN THE DIRECTION OF THE NEXT ARM, OF THE MILKY WAY GALAXY, CONTAINING MANY STARS. IN THE NIGHT SKY OF SPRING

AND FALL, YOU ARE LOOKING THROUGH THE TOP AND BOTTOM OF THE MILKY WAY GALAXY, CONTAINING FEWER STARS. LAMINATE A PICTURE OF A PEPPERONI PIZZA, BACK TO BACK, WITH A PICTURE OF GALAXY M33. THIS GALAXY LOOKS LIKE A PIN-

WHEEL. I PLACE THIS PICTURE IN A PIZZA BOX. LAMINATE A PICTURE OF A PIZZA STORE, BACK TO BACK, WITH THE STORY OF THE PIZZA UNIVERSE. THE PEPPERONI REPRESENTS THE SOLAR SYSTEM. THE PIZZA REPRESENTS THE GALAXY.

THE PIZZA BOX REPRESENTS THE LOCAL GALAXY GROUP. THE PIZZA STORE REPRESENTS THE UNIVERSE.

Catskills Astronomy Club Observing Calendar 2003

New Moon	Observing Dates	What's Up?
Jan 2	Jan 4 Alternative Jan 11 Jan 24	Saturn passes in front of M1
Feb 1	Feb 1 Alternative Feb 8 Feb 22	Jupiter 1 day from Opposition
March 3	March 1 Alternative Mar 8 March 29	Moon, Mercury, Uranus with-in 5 degrees.
April 1	April 5 Alternative Apr 12 April 26	Jupiter nears the Beehive cluster
May 1, 31	May 3 Alternative May 10 May 31	Asteroid Juno at Opposition
June 29	June 7 Alternative June 21 June 28	Pluto near Opposition at mag. 13.8
July 29	July 5 Alternative July 19 July 26	Last chance to see Saturn very well
August 27	Aug 2 Alternative Aug 23 Aug 30	Mars closest to Earth in recorded history
Sep 26	Sep 20 Sep 26	Milky Way at Zenith 9pm
Oct 25	Oct 18 Oct 25	Mars is receding away. See it now!
Nov 23	Nov 1 Alternative Nov 22 Nov 29	Andromeda Galaxy at Zenith 9pm
Dec 23	Dec 20 Dec 27	Coma Berenicid meteors

Catskills Astronomy Club

P.O. Box 252, Lake Huntington, NY 12752

<http://www.catskillsastro.com>

Membership Application

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ e-mail: _____

Level of Experience: ___ Novice ___ Amateur ___ Advanced Amateur

Type of Membership

(Valid for one year from January 1)

___ New Individual.....\$28.50

___ New Family (all with same mailing address).....\$33.50

___ Renewal Individual.....\$23.50

___ Renewal Family.....\$28.50

Sustaining Membership is available for two times the cost of regular membership and your support is appreciated!

Membership in the Astronomical League is reflected by the addition of \$3.50 per membership. Our affiliation with the League requires us to pay for each member.

If family membership, name of participants:

Do you own a telescope? ___ yes ___ no ___ planning purchase? ___

Comments: _____

Your participation in the Catskills Astronomy Club is greatly appreciated!