



The Observer

A Publication of The Cuyahoga Astronomical Association
PO Box 868, North Olmsted, OH 44070

CAA Homepage: <http://www.geocities.com/cuyastro>

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2002 CAA Calendar - Summary

2/11/02 8 p.m.	CAA General Membership Meeting – RRNC
2/25/02 7 p.m.	CAA Board Meeting – Starbucks
3/11/02 8 p.m.	CAA General Membership Meeting – RRNC
3/15/02	Messier Marathon – Spencer Lake
3/16/02	Messier Marathon rain out/cloud out date
3/25/02 7 p.m.	CAA Board Meeting – Starbucks
4/8/02 8 p.m.	CAA General Membership Meeting – RRNC
4/20/02	Astronomy Day – Cleveland Museum of Natural History
4/29/02 7 p.m.	CAA Board Meeting – Starbucks
5/11/02 8 p.m.	CAA Presentation and Star Party – Brecksville
5/13/02 8 p.m.	CAA General Membership Meeting – RRNC
5/18/02 8 p.m.	CAA Presentation and Star Party – Letha House
5/28/02 7 p.m.	CAA Board Meeting – Starbucks
6/10/02 8 p.m.	CAA General Membership Meeting – RRNC
6/24/02 7 p.m.	CAA Board Meeting – Starbucks
7/8/02 8 p.m.	CAA General Membership Meeting – RRNC
7/13/02 8 p.m.	CAA Presentation and Star Party – Letha House
7/29/02 7 p.m.	CAA Board Meeting – Starbucks
8/3/02	CAA OTAA Convention – CAA Observatory at Letha House
8/10/02 8 p.m.	CAA Presentation and Star Party – Brecksville

8/12/02 8 p.m.	CAA General Membership Meeting – RRNC
8/26/02 7 p.m.	CAA Board Meeting – Starbucks
9/9/02 8 p.m.	CAA General Membership Meeting – RRNC
9/30/02 7 p.m.	CAA Board Meeting – Starbucks
October ??	Halloween Bonfire
10/5/02 7 p.m.	CAA Presentation and Star Party – Letha House
10/14/02 8 p.m.	CAA General Membership Meeting – RRNC
10/28/02 7 p.m.	CAA Board Meeting – Starbucks
11/9/02	Twilight to Midnight – The Chalet in the Cleveland Metroparks
11/11/02 8 p.m.	CAA General Membership Meeting – RRNC
11/25/02 7 p.m.	CAA Board Meeting – Starbucks
12/9/02	CAA Christmas Party
	No Board Meeting in December

2002 CAA Calendar - Detail

Monday, February 11

CAA General Membership Meeting at 8 p.m. in the Cleveland Metroparks Rocky River Nature Center. CAA Vice President Al Matyas will be our speaker this month. Al will present "Too cold to go out? Try Cyber Astronomy".

Monday, February 25

CAA Board Meeting at 7 p.m. at Starbucks Coffee Co. Starbucks is

located at 24950 Lorain Road, just west of Columbia Road in North Olmsted.

Monday, March 11

CAA General Membership Meeting at 8 p.m. in the Cleveland Metroparks Rocky River Nature Center. The program this month will be a discussion on how to use a telescope.

Friday, March 15

Messier Marathon at Spencer Lake. Cloud out / rain out date is Saturday, March 16.

Monday, March 25

CAA Board Meeting at 7 p.m. at Starbucks Coffee Co. Starbucks is located at 24950 Lorain Road, just west of Columbia Road in North Olmsted.

Monday, April 8

CAA General Membership Meeting at 8 p.m. in the Cleveland Metroparks Rocky River Nature Center. Program to be announced.

Saturday, April 20

National Astronomy Day at the Shafraan Planetarium at the Cleveland Museum of Natural History. There will be various talks and presentations held throughout the day. We need volunteers to help out at this event.

Please contact Al Matyas if you are interested. Details will be published when the program is finalized.

Monday, April 29

CAA Board Meeting at 7 p.m. at Starbucks Coffee Co. Starbucks is located at 24950 Lorain Road, just west of Columbia Road in North Olmsted.

Saturday, May 11

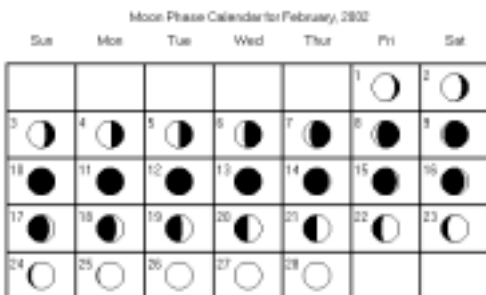
CAA presentation and star party at 8 p.m. at the Brecksville Nature Center. Please bring your telescopes for the public star party that will follow the talk in the Meadows picnic area.

We need a speaker for this event. Please make Al Matyas' job easier by considering giving a talk for this event. If you are interested in giving a talk, please contact Al.

Saturday, August 3

CAA OTAA Convention at the CAA Observatory next to the Letha House Park Barn, 10311 Spencer Lake Rd., just west of Richmond Rd., in Chatham Township.

Sky Events for February 2002



Friday, February 8

Saturn is stationary, 5 a.m. EST.

Saturday, February 9

The moon passes 5° south of Mercury, midnight EST.

Sunday, February 10

Asteroid Juno is at opposition, 8 p.m. EST.

Wednesday, February 13

Uranus is in conjunction with the sun, noon EST.

Saturday, February 16

Asteroid Ceres is in conjunction with the sun, 8 a.m. EST.

The moon passes 5° south of Mars, 7 p.m. EST.

Wednesday, February 20

The moon passes 0.6° north of Vesta, 8 a.m. EST.

The moon passes 0.2° north of Saturn, 7 p.m. EST.

Thursday, February 21

Mercury is at greatest western elongation (27°), 11 a.m. EST.

Friday, February 22

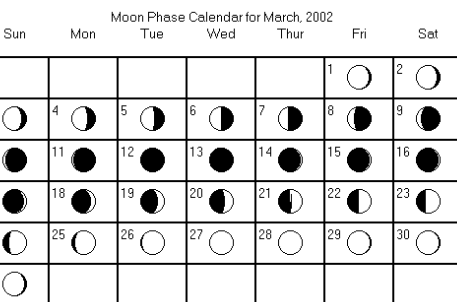
The moon passes 0.9° north of Jupiter, 9 p.m. EST.

Saturday, February 23

Asteroid Flora is at opposition, 8 p.m. EST.

Sunday, February 24

Mercury passes 0.5° south of Neptune, 8 a.m. EST.



Sky Events for March 2002

Friday, March 1

Jupiter is stationary, 10 a.m. EST.

Friday, March 8

Mercury passes 1.2° south of Uranus, 10 p.m. EST.

Sunday, March 10

The moon passes 4° south of Neptune, 4 a.m. EST.

Asteroid Euterpe is at opposition, midnight EST.

Monday, March 11

The moon passes 4° south of Uranus, noon EST.

The moon passes 3° south of Mercury, 8 p.m. EST.

Sunday, March 17

The moon passes 4° south of Mars, 8 p.m. EST.

Wednesday, March 20

The moon passes 0.5° north of Saturn, 5 a.m. EST.

The moon passes 0.5° north of Vesta, 5 a.m. EST.

Vernal equinox is at 2:16 p.m. EST.

Friday, March 22

The moon passes 1.1° north of Jupiter, 7 a.m. EST.

Sunday, March 31

Saturn passes 4° north of Aldebaran, 11 a.m. EST.

Club News / Stories

**Cuyahoga Astronomical Association
Financial Report
January 14, 2002**

Bank Account Balance	\$3234.83
Cash On Hand	\$ 102.21
Total Assets (approx.)	\$3337.04

Art Nenadal, Treasurer

2002 Membership Renewal Reminder

If you haven't done so already, please pay your 2002 CAA membership dues to keep your membership active and to keep receiving your subscription to *The Observer*. Your subscription to *The Observer* will expire with the March 2002 issue if you haven't paid your dues.

Vote To Be Held On Earlier Meeting Time At The March General Membership Meeting

At the January General Membership meeting we discussed the possibility of moving up our General Membership meeting starting time to 7:30 p.m. from 8 p.m. Since enough interest was expressed by the membership in

membership in attendance, we will be voting on changing our meeting starting time from 8 p.m. to 7:30 p.m. at our March General Membership meeting.

Donation Thank You's

We would like to thank CAA member Michael Chausanski for donating the following items to the club:

1. 6" f/8 Newtonian reflector telescope
2. 20 years of Sky and Telescope magazines from 1980 – 2000 for the CAA Library

Thanks for your donations Michael.

2002 CAA Membership List

Enclosed with this month's *Observer* is an updated 2002 CAA Membership list. Please look it over and send any corrections to either Art Neadal or myself via email, snail mail to our P.O. Box, or give either of us a call. Thanks.

Jeff Lewis, Secretary and Editor.

Welcome New Members

Please join me in welcoming the following new members to the CAA:

1. Myron & Maria Antoniw
2. Michael Chausanki
3. Jim Cofer
4. Ken Hubal
5. David Jacquet
6. John Madigan
7. Mr. Gayle Norris
8. Rick, Cheri, & Michelle Pogozelski
9. Nicholas Popovich
10. William Rodriguez
11. Bernie Supinski
12. Louise Tolhurst

Don't Forget To Sign In When Using The Observatory, Warm Up Room, Or Grounds At Letha House

This is a reminder to all members that anyone using the observatory, warm up room, or grounds should sign

in inside the warm up room on the clipboard on the interior door leading to the kitchen and lavatory as Standard Operating Procedure (provided someone has the keys to get into the warm up room).

Looking Up By Charles H. Grace

Who Wants to be a Thousandaire?

1. A brown dwarf is:
 - a) a planet whose mass is too small to create a nuclear reaction
 - b) a pygmy in the largest African tribe
 - c) a type of star of which many have been clearly identified
 - d) a wine grape that grows on the west bank of the Rhine
2. A black widow pulsar is a:
 - a) lady, young, slim, mascara, straight hair, at Shooter's bar
 - b) pulsar whose radiation is destroying a companion star
 - c) spider having a seizure from eating a pretzel
 - d) pulsar that pulsates once per second or slower
3. Diffraction occurs when:
 - a) a telemarketer calls while you're with a friend
 - b) light strikes a surface separating two different media
 - c) a bent fender is popped out without repainting
 - d) a wave passes near an obstruction
4. The advance of the perihelion of Mercury is:
 - a) a timing procedure for automotive ignition
 - b) movement of the orbit in the same direction as the planet revolves
 - c) the rise of meniscus in a thermometer
 - d) a fact that conflicts with Einstein's general theory of relativity
5. Astrometry is a branch of astronomy involving:
 - a) statistical analysis of astrological predictions
 - b) measurement of positions of celestial bodies

- c) accounting procedure for "Star Wars" box office receipts
- d) Who cares? I'll never use the word

6. A CCD is:

- a) a light-sensitive electronic detector
- b) a disk for storing high-fi music
- c) URL
www.CorrectingContemptibleDefectors.gov
- d) notes in the second line of "My Country 'Tis Of Thee"

7. Astronomy is a highly respected profession partly because:

- a) everyone pays attention to it
- b) it has sex appeal, for unfathomable reasons
- c) it draws upon and requires many scientific disciplines
- d) it pays big bucks

8. Einstein's special theory of relativity analyzes:

- a) techniques for greeting shirt-tail relatives at a family reunion
- b) the gravitational effects of matter on space/time relationships
- c) observers moving relative to one another at constant velocity
- d) Miss Manners' column about turbulent teen relationships

Answers

- 1 = a) Thus far, none has been identified unambiguously.
- 2 = b) Black widow pulsars have millisecond periods.
- 3 = d) (What is defined by b is refraction.)
- 4 = b) This provides evidence of Einstein's general theory.
- 5 = b) It involves precession, nutation, proper motion, etc.
- 6 = a) Charge-coupled device.
- 7 = c) Physics, chemistry, electricity, mechanics, etc.
- 8 = c) Constant velocity. (His general theory is defined by b.)

An Inexpensive Telescope by Alex Panzer

Looking into the commercial adds for telescopes, prices are much over \$300, for rather small instruments. Also sometimes of questionable quality. There are a number of possible options to construct a rather optically

optically excellent instrument for very little monetary investment.

Small telescopes 60 to 75 mm diameters with focal ratios of from f/4 to f/8, can be of great use and perform very well as "RFT" or rich field telescopes. Many such "RFT" scopes can be hand held - do not require complex heavy mountings. However, simple light weight mounts can be constructed with minimal tools or machine work. In many cases even a "Hand Held" system will be enough. Keep in mind, this is not the "conventional" 50 or 60 mm Department store telescope, but rather a RFT, or "spotting" scope.

There are several very good inexpensive sources for excellent objective lens system up to 75 mm in aperture, and focal lengths from 450 to 800 mm. These lens systems are cemented, coated, and very often of special glass and curve designs to produce well corrected objectives for both visual and CCD or film cameras. An excellent OG is available for \$19.95 is 62mm x 486mm, cemented and coated. This particular lens was examined with Auto-Foucault, and Rochi grating and indicated no spherical aberration, no astigmatic effects, and very good chromatic color correction when tested on a star with a 6mm eyepiece. There are other lenses also available such as 65mm x 900mm air spaced doublet for \$15.00, and other items all under \$30.00.

Because of the lens diameter size, they will fit into regular PVC plastic pipe diameters with just minor hand tooling. Several such 'scopes were made up and tested upon completion with a Lazer, and indicated excellent optical path alignment. PVC pipe is easy to work with, available in sizes that can be 'telescoped' together to form smooth working surfaces. These instruments can produce very high quality images, with minor expenditure, and will take standard 1 1/4 inch eyepieces. The scopes being of lower f/ratio do provide excellent wide field views of the milky way, and yet can give interesting images of Moon and Planets with higher magnification oculars. The instruments are light, make for good portability, and can be used

portability, and can be used with a correcting eyepiece prism to operate as a "Spotting Telescope" - with images that can be better than expensive commercial Monoculars. Most commercial units do not have the interchange ability for eyepieces.

So give it a try, a couple of evenings work could produce a telescope that will give the user years of pleasure and the ability to observe some good deep sky objects.

More on CCD camera attachments, and other possibilities for simple home made telescope later.

Attention Sidewalk Astronomers

First event will be at the North Olmsted Public Library on Wednesday, February 13th, from 7:30 to 9:00 P.M. We will set up on the south side of the building on the grass. This is weather permitting of course. If you will send me an e-mail I will try and set up a distribution list so I can get information out to you quickly. If the weather is iffy...I will send out a decision by 6:05 P.M. My e-mail address is: ldittrick@netzero.net. If you prefer to call, my home phone is: 440-236-6239. I will attempt to set up these events around 1st quarter when possible. Thanks, Lon Dittrick.

CAA Logo T-Shirts and Red LED Reflectors Still Available

We still have some CAA logo T-Shirts and red LED reflectors for sale. T-Shirts are \$10 each (\$12 for XXL), and the red LED reflectors are \$5 each. See Al Matyas at one of our upcoming meetings if you are interested.

Swap Corner

WANTED: 1 1/2 inch (new/used) Rack & Pinion Focuser with 2 inches or more of drawtube travel. Please contact Les Kee 440-238-6938 or lkee@ix.netcom.com.

FOR SALE: 5" f/9 refractor O.T.A. in like new condition, includes rings and finder. \$250 or best offer.

Please contact Ken Hubal 216-398-0912.

FOR SALE: 6" f/8 refractor O.T.A. by Sky Instruments, includes rings and finder. Used, in excellent condition. \$350 or best offer. Please contact Ken Hubal 216-398-0912.

Lost and Found

A hunter green and gray wool scarf was found at Letha House during the Leonid Meteor shower. If this scarf belongs to you, please claim it at one of our upcoming meetings.

Upcoming Astronomical Events

Frontiers of Astronomy Lecture Series

Thursday, March 21, 2002 at 8 p.m. at the Cleveland Museum of Natural History in Murch Auditorium.

"Life, the Universe and Everything: The Astrophysical Perspective" will be presented by Dr. Gary J. Ferland from the University of Kentucky.

People have long wondered where we, the Earth and the Universe around us came from. Astrophysics now has a pretty good idea. Dr. Gary J. Ferland, a professor in the department of physics and astronomy at the University of Kentucky, explains how astronomers have been able to see farther back in time by looking increasingly larger distances from the Earth. He discusses what the careful analysis of light from very distant objects has revealed about the events that occurred many billions of years ago, including the creation of our Solar System.

This is the fourth of five free public lectures in the Frontiers of Astronomy series. This free lecture series sponsored by the Department of Astronomy - Case Western Reserve University, The Cleveland Museum of Natural History, and The Cleveland Astronomical Society offers those with an interest in astronomy the chance to learn about some of the latest research in the field. No tickets or reservations are required. On clear

evenings, the Museum's observatory will be open following the lectures.

For more information or to receive a brochure listing all speakers, call (216) 231-4600, ext. 253, 362, or 360.

Other News / Stories

Note From The Desk of The Editor

I am always looking for articles for *The Observer*. If there are any aspiring authors out there who want to contribute an article, share a story or observation, etc. please do so, and I will include it in the next edition. Also, if you have any items for sale, or if you are looking for any items, send these in and I will include it in the *Swap Corner*. Remember, this is your newsletter, and participation from the general membership can only make the newsletter better. Please send articles, items for sale, items wanted, suggestions, and/or comments to:

Jeff Lewis

5623 Allendale Drive

North Olmsted, OH 44070-4622

Or you can send them via e-mail to bruisse@ameritech.net.

Thanks and Clear Skies!