April 2002 Vol. XXXI No. 4

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

4/8/02 8 p.m.	CAA General Membership Meeting – RRNC
4/20/02 10 a.m. 5 p.m.	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, April 8

CAA General Membership Meeting at 8 p.m. in the Cleveland Metroparks Rocky River Nature Center. April's speaker will be CAA member Bill Gerling. Bill will present "Info on a Star by Reading the H-R".

Saturday, April 20

National Astronomy Day at the Shafran Planetarium at the Cleveland Museum of Natural History from 10 a.m. until 5 p.m. 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. There will also be planetarium shows held throughout the day at the new Shafran Planetarium. It is estimated that this event will draw between 1,000 and 2,000 people for the day so we will need your help. No telescopes are needed since there will NOT be a star party that evening.

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.

Monday, May 13

CAA General Membership Meeting at 8 p.m. in the Cleveland Metroparks Rocky River Nature Center. May's speaker will be Dan Glover from NASA who will be giving an update on mission status and information gathered from the Galileo and Cassini missions.

Saturday, May 18

CAA presentation and star party at 8 p.m. at the Letha House Warm Up

Room and CAA Observatory. Please bring your telescopes for the public star party that will follow the presentation. 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.

Tuesday, May 28

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, June 10

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

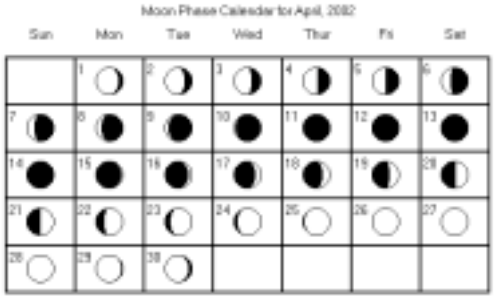
Monday, June 24

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, 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 April 2002



Saturday, April 6

The moon passes 4° south of Neptune, 11 a.m. EST.

Sunday, April 7

Mercury is in superior conjunction, 5 a.m. EDT.

The moon passes 4° south of Uranus, 9 p.m. EDT.

Sunday, April 14

The moon passes 3° south of Venus, 1 p.m. EDT.

Monday, April 15

The moon passes 2° south of Mars, 7 p.m. EDT.

Tuesday, April 16

The moon passes 0.8° north of Saturn, 4 p.m. EDT.

Wednesday, April 17

The moon passes 0.7° north of Vesta, 6 a.m. EDT.

Thursday, April 18

The moon passes 1.6° north of Jupiter, 7 p.m. EDT.

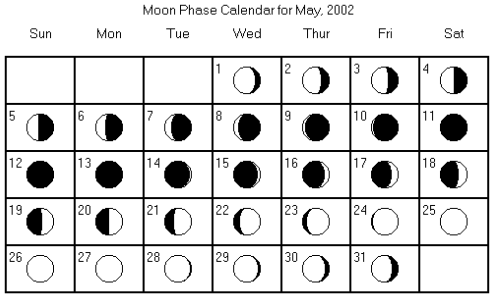
Monday, April 22

Lyrid meteor shower peaks.

Monday, April 29

Mars passes 6° north of Aldebaran, 9 a.m. EDT.

Sky Events for May 2002



Friday, May 3

The moon passes 4° south of Neptune, 8 p.m. EDT.

Mercury is at greatest eastern elongation (21°), midnight EDT.

Saturday, May 4

Venus passes 6° north of Aldebaran, 10 a.m. EDT.

Mars passes 2° north of Saturn, 1 p.m. EDT.

Sunday, May 5

Eta Aquarid meteor shower peaks.

The moon passes 4° south of Uranus, 6 a.m. EDT.

Tuesday, May 7

Venus passes 2° north of Saturn, 2 p.m. EDT.

Friday, May 10

Venus passes 0.3° north of Mars, 5 p.m. EDT.

Monday, May 13

The moon passes 3° south of Mercury, 5 p.m. EDT.

Tuesday, May 14

The moon passes 1.1° north of Saturn, 4 a.m. EDT.

The moon passes 0.6° south of Mars, 3 p.m. EDT.

The moon passes 0.8° south of Venus, 7 p.m. EDT.

Wednesday, May 15

The moon passes 1.1° north of Vesta, 8 a.m. EDT.

Thursday, May 16

The moon passes 2° north of Jupiter, 8 a.m. EDT.

Sunday, May 26

Penumbral lunar eclipse.

Monday, May 27

Mercury is in inferior conjunction, 3 a.m. EDT.

Friday, May 31

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

Club News / Stories

Cuyahoga Astronomical Association Financial Report March 2, 2002

Bank Account Balance 11/23/01	$3792.02
Cash On Hand 11/23/01	$ 85.21
Total Assets 11/23/01 (approx)	$3877.23
Bank Account Activity:	
Deposits:	
12/15/01 Interest	$ 1.58
12/21/01 Membership, Subscriptions, Party	$ 209.95
1/16/02 Interest	$ 1.50
2/9/02 Memberships, Subscriptions, Etc	$ 351.90
2/16/02 Interest	$ 1.41

Expenditures:	
12/3/01 Door Prizes	$ 80.73
12/10/01 Coast Guard Club – Christmas Party	$ 442.46
12/10/01 Newsletter	$ 34.00
1/14/02 Refreshments	$ 29.82
1/14/02 Newsletter	$ 27.20
1/21/02 Sky Publishing – 3 S&T Subscriptions	$ 89.85
1/21/02 Kalmbach Publishing – 2 Astronomy Subs	$ 58.00
2/2/02 Postmaster – Annual P.O. Box Fee	$ 55.00
2/11/02 Observatory Materials	$ 87.96
2/11/02 Newsletter	$ 62.19
2/11/02 Observatory Materials	$ 16.90
2/11/02 Refreshments	$ 35.42
3/1/02 Sky Publishing – 2 S&T Subscriptions	$ 59.90
Bank Account Balance 3/2/02	$3278.93
Petty Cash Activity:	
Deposits:	
11/27/01 Nenadal- Christmas Party	$ 17.00
1/14/02 Refreshments	$ 25.69
2/11/02 Refreshments	$ 24.51
Expenditures:	
None	
Cash On Hand 3/2/02	$ 152.41
Total Assets 3/2/02 (Approx)	$3431.34
Bank Account Balance Includes	
Observatory Fund Donation	$ 200.00
Available Assets	$3231.34

Art Nenadal, Treasurer

General Membership Meeting Time Will Change From 8:00 p.m. to 7:30 p.m.

At last month's general membership meeting, we held a vote on whether or not to change our meeting time from 8:00 p.m. to 7:30 p.m. A total of 41 ballots were cast: 38 for the change, and 3 against the change. So by a majority vote of 38 – 3, the issue passes and the meeting time will change to 7:30 p.m. **The new time will probably be effective for the July membership meeting since the Cleveland Metroparks requires about 4 months advance notice for publication changes. An announcement will be made in next month's *Observer* of when the new meeting time will take effect.**

Vote To Be Held For Granting Honorary Life Memberships At The April General Membership Meeting

The CAA Board of Directors has proposed Honorary Life Memberships for the following CAA Members:

1. Bob Blaney
2. John Garvey
3. Alex Panzer
4. Steve Farkas

According to our bylaws, Honorary Life Membership shall be granted by a unanimous vote of the Board through the Formal Voting Procedure. The Formal Voting Procedure is defined as follows:

1. The issue shall be announced and opened for discussion during at least two membership meetings prior to the meeting at which the vote is to be taken.
2. Written notification of the issue and the date the vote is to be taken shall be mailed to the entire membership, postmarked at least three weeks prior to the vote.
3. A majority vote shall carry an issue unless Robert's Rules specifies a different percentage.

The issue was announced and opened for discussion at the February and March membership meetings. We will be voting on awarding these Honorary Life Memberships at the upcoming April membership meeting. The date of the vote was published in the March issue of *The Observer*, which was post marked more than 3 weeks prior to the date of the vote.

Welcome New Members

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

1. Larry Baumann

Looking Up
By Charles H. Grace

Edward FitzGerald

The Rubáiyát of Omar Khayyám

"Wake! For the Sun who scatter'd into flight

The Stars before him from the Field of night,

Drives Night along with them from Heav'n and strikes

The Sultan's Turret with a Shaft of Light."

It is the scattering of sunlight by the earth's atmosphere that makes stars invisible from the Earth (but not from satellites), in the daytime. Very small particles in the atmosphere (less than one wavelength) scatter the blue light much more strongly than the red light, making the whole sky appear blue. This is Rayleigh scattering.

Shakespeare

Hamlet

"Doubt thou the stars are fire;

Doubt that the sun doth move;

Doubt truth to be a liar;

But never doubt I love."

Although it is figurative to say that the stars are "fire," in a way it is true. They are aggregations of extremely hot material, mostly hydrogen and helium. In the constellation Scorpius, the binary pair Antares A (which is red) and the smaller Antares B (which is blue) have surface temperatures of about 3,000 Kelvin and 15,000 Kelvin respectively.

Robert Frost

Bravado

"Have I not walked without an upward look

Of caution under stars that very well

Might not have missed me when they shot and fell?

It was a risk I had to take — and took."

Frost is being playful, knowing that the probability of his being struck was negligible. Meteors are streaks of light caused by meteoroids (shooting stars), which are small pieces of dust that burn up in our upper atmosphere because of friction with the air. Larger bodies that make it all the way to the earth are called meteorites. About 3300 meteorites hit the earth each year. Most of them are unrecorded because they fall in oceans, deserts, etc.

Anonymous Aztec Indian

The Flight of Quetzalcoatl.

"It ended . . .

With his body changed to light,

A star that burns forever in that sky."

This may be an Aztec version of heaven. I don't know whether all deceased Aztec Indians are believed to become stars in the sky, or whether only the gods such as Quetzalcoatl are thought to become stars.

Swap Corner

WANTED: 1½ 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.

Upcoming Astronomical Events

Other OTAA Meetings

Saturday, June 8, 2002: Chagrin Valley Astronomical Society OTAA convention at Indian Hill Observatory

Saturday, August 10, 2002: Mahoning Valley Astronomical Society OTAA meeting. Registration – 5:00 p.m.

Saturday, September 7, 2002: Black River Astronomical Society OTAA meeting in Birmingham.

Friday & Saturday, October 4/5, 2002: Richland Astronomical Society Hidden Hollow convention at the Hidden Hollow Campground in Mansfield, Ohio.

Frontiers of Astronomy Lecture Series

Thursday, April 18, 2002 at 8 p.m. at the Cleveland Museum of Natural History in Murch Auditorium.

"Making Sense of Extrasolar Planets" will be presented by Dr. William Cochran from the University of Texas at Austin.

Over the past six years, nearly a hundred Jupiter-sized planets have been found around nearby stars similar to our Sun. However, these planets are not at all like the planets in our Solar System. If all of the planets in question formed in the same manner, then the current theory of Solar System formation must change significantly. Dr. William Cochran, a senior research scientist at the W. J. McDonald Observatory of the University of Texas, discusses the techniques used to detect planets around other stars, the interesting results that have been obtained and their implications.

This is the last 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.

Nathan And Fannye Shafran Planetarium Is Now Open

The new Shafran Planetarium, one of the best equipped and most compelling facilities of its size in the world, is now open to schools and the public. The 50 foot long Spaceway that leads to the Reinberger Hall of Astronomy and the Shafran Planetarium is on the right side of the Museum's main lobby. The Spaceway is dark and illuminated with pulsating fiber optic lights that create a bridge to "transport" visitors of all ages from our world to somewhere in space. Next is the Hall of Astronomy, which features interactives that explain astronomy basics, such as how much you would weigh on other planets and what causes the phases of the Moon. The centerpiece of the hall is the Museum's historic Hanna Star Dome – the first planetarium in Ohio, which has been refurbished with fiber optic lights and shows the stars for each of the 12 months of the year.

The **Nathan and Fannye Shafran Planetarium** has comfortable, theater-style seating for an audience of 87. The world's first Skymaster ZKP3/S projector system, produced by German optical firm Carl Zeiss Planetaria, is the centerpiece of the facility. It is capable of displaying 5,000 plus stars and celestial objects. It also produces the motions and appearances of the visible planets (Mercury, Venus, Mars, Jupiter and Saturn) in the night sky. In addition, the planetarium theater has a marvelous video "all sky" system, which projects digital video imagery, and a digital sound system. The Museum's tradition of custom tailoring live programs for our various audiences continues.

The planetarium's architectural design by van Dijk Westlake Reed Leskosky Architects is unique, too. The facility looks like and functions as an astronomical instrument. The 60 foot tall cone-shaped structure has a chamfered top that slopes upward at 41 ½ degrees toward Polaris, the North Star. Sighting markers in a new viewing plaza to be installed this summer will assist visitors in locating the star. In addition to seeing the North Star on clear nights, visitors will be fascinated with the overall exterior of the planetarium. It sparkles with "stars" – thanks to fiber optic lights that are embedded in the copper-colored titanium-coated stainless steel plates covering the structure's exterior.

The public's response to the new Shafran Planetarium has been so overwhelming that timed tickets are now being issued (reserved tickets on a specific day and hour when shows are scheduled.) Reservations can be made over the phone or in person. At this time the Museum is not capable of on-line computer reservations.

Planetarium tickets are $3 per person with the purchase of Museum admission: $6.50 for adults; $4.50 ages 7-18, college students with IDs and senior citizens; $3.50 children 3-6 years of age. Free for infants 2 and under. Planetarium tickets should be reserved in advance. To guarantee seating, please arrive 20 minutes before show time to claim your tickets with your confirmation number. Unclaimed tickets will be released for purchase on a first-come, first serve basis 10 minutes before show time.

Call the Museum's box office Monday through Friday during regular business hours at 216-231-1177, or 800-317-9155, ext. 279, for more details and to make reservations.

You won't believe your eyes when an interstellar cloud of gas or the star-studded Milky Way flies past you. Watch out for asteroids and streaking fireball meteors, and don't fall into that black hole! Here is a schedule of the planetarium shows for April:

Navigating the Sky Above, the Earth Below. Monday through Friday at 2:30 p.m.; Wednesday at 8:30 p.m.; Saturday at 10:30 a.m., 12:30, 1:30, and 3:30 p.m.; and Sunday at 11:45 a.m., 12:30, 2 and 4 p.m. (For ages 5 and older.)

Finding Your Way, a children's version of Navigating the Sky Above, The Earth Below. Wednesday, 7:45 p.m.; Saturday, 11:30 a.m. and 2:30 p.m.; Sunday 1:15 and 3 p.m. (For children and families – all ages.)

The Ralph Mueller Observatory At The Cleveland Museum Of Natural History

The observatory features a 10 ½" refracting telescope that allows visitors to see magnified views of the Moon, stars, planets and even distant galaxies on clear evenings. The giant, brilliant planets of Jupiter and Saturn dominate the winter sky and are impossible to miss on a clear night. See the cloud bands of Jupiter along with four of its moons and the rings of Saturn. The observatory is open on Wednesdays, 8:30 to 10 p.m. from September through May. Free with Museum admission.

Apollo Rendezvous & Star Party!

The Miami Valley Astronomical Society and The Boonshoft Museum of Discovery (formerly the Dayton Museum of Natural History) present the 32nd Annual Apollo Rendezvous & Star Party!, June 14-15, 2002, Dayton, Ohio.

AR2002: Astronomy, Art & Observing

Apollo Rendezvous
What It's About

Apollo Rendezvous is one of the premier annual gatherings of amateur astronomers in the United States. Amateur astronomers meet with friends and colleagues from throughout the country and the world, exchange information, enjoy talks by outstanding speakers, view film and slide presentations, shop for astronomical items, and view some of the finest amateur telescopes, astrophotography and astro-artwork on display anywhere.

Theme & Speakers

Our topics this year center around the classic themes of art and observing. We are honored to be joined this year by Terry Mann, Don Parker, Leif Robinson, and Mark Trueblood. Would you like to put your telescope in space?! Terry Mann is the Secretary of the Astronomical League and will be speaking on the International Space Station Amateur Telescope project. Don parker really needs no introduction. He is a wonderful speaker, funny, knowledgeable and always has a boatload of great photos and advice for amateurs of all levels. Leif joined *Sky & Telescope* nearly 40 years ago, and recently retired as the Editor-in-Chief. He is about to get "serious" in his retirement about linking art to amateur astronomy, and will offer a delightful presentation on that subject. Mark runs what is arguably one of the premier robotic observatories in the country. His observatory is providing the testing facilities for the ISS Amateur Telescope. He will be sharing a wealth of information useful to anyone building any kind of home observatory, with hard-won, practical advice and lessons-learned on moving to semi-automatic and robotic operation. *Join us for some **great** presentations!*

Amateur Astronomer Workshop: How to Build & Automate an Observatory

Saturday morning will be devoted to an Amateur Astronomer Workshop on How to Build and Automate an Observatory. Mark Trueblood will provide valuable information and lots of lessons learned on building on observatory, small or large, and will discuss in depth some of the issues in automating it.

Vendors & Prizes

As always, Rendezvous will offer more valuable door prizes than almost any such event in the U.S., with 1st prize in the raffle this year being the fabulous Sky Window binocular mirror with 60mm binos. View the entire sky in absolute comfort! Use the binos during the day for terrestrial observing.

The vendors are always central to Rendezvous. Products from vendors such as Meade, Celestron, Orion, Software Bisque, Apogee Instruments, TECH 2000, Sky Publishing, Astronomy to Go, Hands on Optics, Mitterling Meteorite, Pete's Photo World, University Optics, and many others, are typically available *at Rendezvous discount prices.*

BBQ & Star-Gaze

Saturday will conclude with our traditional picnic/BBQ and stargaze at our John Bryan State Park Observatory. The food is great, and grills are available for anyone who wishes to do a little of their own cooking. More on that in the next flyer and on their web site!

See their Website http://www.mvas.org for registration information.

Other News / Stories

Mars Odyssey Mission Status

MEDIA RELATIONS OFFICE JET PROPULSION LABORATORY CALIFORNIA INSTITUTE OF TECHNOLOGY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION PASADENA, CALIF. 91109. TELEPHONE (818) 354-5011 http://www.jpl.nasa.gov

March 13, 2002

Flight controllers for NASA's Mars Odyssey spacecraft report the martian radiation environment experiment began gathering science data

data today after their troubleshooting efforts successfully reestablished communications with the instrument.

Engineers have been working since late February, trying a variety of techniques to communicate with the instrument, which stopped working in August. The results of their tests indicate the problem may be related to a memory error in the onboard software of the radiation instrument.

"This is very exciting. We have been carefully working this issue, and establishing communication means we now have the entire payload working," said Roger Gibbs, Odyssey's project manager at NASA's Jet Propulsion Laboratory, Pasadena, Calif.

The team established initial communication with the instrument late last week and has spent several days evaluating its health. Controllers returned the radiation monitor to its science collection mode this afternoon.

Odyssey's camera system and gamma ray spectrometer suite are continuing to collect data and are working well. Science team members reported this week that the camera's infrared and visible image data are providing "new eyes" to see the makeup of martian surface materials. Current targets for the camera include the candidate landing sites for the twin 2003 Mars exploration rovers. The neutron detectors in the gamma ray spectrometer suite are refining the detail in maps of near-surface hydrogen and are tracking changes in the surface as the martian northern winter comes to an end.

JPL manages the 2001 Mars Odyssey mission for NASA's Office of Space Science, Washington, D.C. Principal investigators at Arizona State University in Tempe, the University of Arizona in Tucson, and NASA's Johnson Space Center, Houston, operate the science instruments. Additional science investigators are located at the Russian Space Research Institute and Los Alamos National Laboratories, New Mexico. Lockheed Martin Astronautics, Denver, is the prime contractor for the project, and developed and built the orbiter. Mission operations Mission operations are conducted jointly from Lockheed Martin and from JPL, a division of the California Institute of Technology in Pasadena.

LAST CHANCE TO SEE COMET IKEYA-ZHANG

MEDIA RELATIONS OFFICE JET PROPULSION LABORATORY CALIFORNIA INSTITUTE OF TECHNOLOGY NATIONAL AERONAUTICS AND SPACE ADMINISTRATION PASADENA, CALIF. 91109 TELEPHONE (818) 354-5011 http://www.jpl.nasa.gov

FOR IMMEDIATE RELEASE March 29, 2002

Night owls and early birds can catch a glimpse of Comet Ikeya-Zhang as it passes by Earth in the next few weeks on its four-century journey around the Sun.

The comet passed closest to the Sun on March 18th, and is now headed out of the solar system past Earth, passing closest to us (just 37.5 million miles, or 60 million kilometers) on April 29. To see the comet, look low in the western sky during late evening twilight. The comet will get lower and lower on the horizon until April 4; after that it will be visible in the early morning sky in the east.

"The comet is bright enough to see with the naked eye, but having binoculars or even a small telescope will help pinpoint its location," said Dr. Don Yeomans, head of NASA's Near-Earth Objects Program Office at the Jet Propulsion Laboratory, Pasadena, Calif.

Among the comet-watchers will be Dr. Michael Hicks, a comet scientist from JPL. Hicks will use a telescope to study the dust from Ikeya-Zhang, dust that comes from the very edges of the solar system and has a sharply slanted orbit, compared to the planets. The information he hopes to gather includes the dust particles' size, temperature and composition.

"Comet dust is some of the most pristine material from the solar system's formation," said Hicks. "Studying comets adds another little bit to bit to the puzzle of how the solar system came to be."

Comets, clumps of rock and ice, were made when the solar system formed 4.5 billion years ago from the same material that made the planets and Sun. When its orbit takes it far from the Sun, the low temperature of deep space keeps the comet frozen. As the comet comes close to the Sun, it heats up, emitting gases and the dust that reflects the Sun's rays and makes the comet visible from Earth.

Ikeya-Zhang, which was discovered in early February by a Japanese and a Chinese astronomer, was likely seen in 1661 on an earlier journey through the solar system.

JPL, a division of the California Institute of Technology, manages the Near-Earth Objects program for NASA's Office of Space Science, Washington, D.C. More information is available at http://neo.jpl.nasa.gov and http://www.jpl.nasa.gov.

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 issue. Also, if you have any items for sale, or if you are looking for any items, send these in and I will include them in the *Swap Corner*. Remember, this is your newsletter, and participation from the general membership can only make the newsletter better. Thanks to all who have taken the time to send in articles. 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 bruise@ameritech.net.

Thanks and Clear Skies!