



## STAR FIELDS

Newsletter of the Amateur Telescope Makers of Boston  
Including the Bond Astronomical Club  
Established in 1934  
In the Interest of Telescope Making & Using

Vol. 13, No. 3 March 2002

### This Month's Meeting...

Thursday, March 14th, 2002, at 8:00 PM  
Phillips Auditorium, Harvard-Smithsonian  
Center for Astrophysics

### This Month's Speaker...

THIS MONTH'S speaker will be Jay Pasachoff, professor of astronomy at Williams College, and currently on sabbatical at the Harvard-Smithsonian Center for Astrophysics. The title of his talk will be "The Sun and Solar Eclipses." Prof. Pasachoff is the author of the *Peterson Field Guide to the Stars and Planets* and co-author of *Nearest Star: The Exciting Science of Our Sun*. See [www.solarcorona.com](http://www.solarcorona.com)

Join us for dinner at 5:45 PM at the Changsho Restaurant located at 1712 Mass Ave. in our fair city, Cambridge.

### President's Message...

THE TELEVISION program "Chronicle" aired "Seeing Stars" on Friday, February 22nd on Channel 5 at 7:30pm. Scenes featured members observing through telescopes as well as others in the process of grinding and polishing mirrors. BRUCE BERGER explained to the viewing audience the reasons why anyone in their right mind would want to make a telescope mirror from scratch. EILEEN MYERS, a member of the American Association of Variable Star Observers, explained the importance of why amateurs are needed to observe and record the change of a star's magnitude. I hope somebody has a copy to donate to the club. It will become part of our history and viewing pleasure.

On Feb 28<sup>th</sup> DAN FELDKHUN brought a laser diode to the clubhouse and we tested the idea of using it as an artificial star for star testing telescopes. The conclusion was it was way too bright and that next week a 25-micron (0.001") pinhole would be used to reduce the light's intensity.

If the weather remains as mild as it has, we may have to fire up our newly acquired mosquito magnet earlier than expected.

We are all pretty much convinced that BRUCE BERGER may have finally finished his mirror! We all hope to see your telescope at Stellafane this year, Bruce. Congratulations!

In anticipation of the club elections held in June 2002, we should start to give some thought to those who will make up the next nominating committee. We will form the nominating committee during our April meeting, and they will determine and present the slate of officers during our May meeting. In June we will vote in the new executive board and the gavel will be passed on to the new President.

-Bob Collara, President-

### February's Minutes...

PRESIDENT BOB COLLARA opened the 745<sup>th</sup> meeting of the Amateur Telescope Makers of Boston, including the Bond Astronomical Club. Our first speaker was ATMob and AAVSO (American Association of Variable Star Observers) member MIKE HILL. Mike described how he observes solar flares electronically using a VLF radio receiver. He talked about his equipment, observing program and his involvement with the AAVSO Solar Division. Next ATMob and AAVSO member ED LOS talked about the magnetometer he built in December in hopes of catching some of the disturbances from aurorae in the declining phase of the current sunspot cycle. The third speaker was ATMob member JOSEPH ROTHCHILD, who showed us his latest modifications on his red Dob based on the article by Alan Adler entitled "Thermal Management in Newtonian Reflectors" from *Sky & Telescope*, January 2002, pg. 132-136. To cool the boundary layer of air in front of the mirror, Joseph used a 3" fan powered by a 12-volt battery, and opposite made four 1 1/2" exit holes (same total area as the 3" hole). He reported that while observing, turning the fan on did provide improvement, and after turning it off, detail disappeared.

At the business meeting club officers gave their reports. The camping trip to Baxter State Park will cost \$4 per night. April 20<sup>th</sup> is Astronomy Day at the Boston Museum of Science. This year displays and tables will be set up in the Niles Gallery.

-Eileen Myers, Secretary-

### Membership Report...

WE WARMLY welcome one new member this month: ROBERT CARLSON from Bedford MA. Club membership stands at 335 paid members.

-John Small, Membership Secretary-

### Treasurer's Report...

FOR THE month of January, we had \$2,098.26 in revenue (mostly interest on the CD) and \$1,352.18 in expenses for a net income of \$746.08 for the month.

As of January 31, 2002 our assets were:

Checking Account - Regular	\$12,279.02 (see Note)
Investments	\$ 26,001.67
Total Current Assets	\$ 38,280.69

Of the total, \$2,641.21 is in the Land Fund and \$155.00 is for clubhouse key deposits.

Note: \$5,000 was transferred from the checking account to the CD in January.  
*-Bernie Volz, Treasurer-*

## Clubhouse Report...

### Clubhouse Saturday Schedule

March 9	Dan Feldkhun	Lew Gramer
<b>March 16</b>	<b>No white lights</b>	<b>Messier</b>
	<b>March 15-17</b>	<b>Marathon #2</b>
March 16	Steve Mock	Tom Wolf
March 23	Henry Hopkinson	Jim Suslowicz
<b>March 30</b>		<b>"No Blue Moon in 2002" Work Party #3</b>
March 30	Rich Burrier	Steve Herzberg
<b>April 6</b>	<b>StarConn</b>	<b>Wesleyan University in Middleton CT</b>
April 6	John Small	Tom Wolf
April 13	John Panaswich	Art Swedlow
<b>April 20</b>	<b>ASTRONOMY DAY</b>	<b>Boston Museum of Science</b>
April 20	Peter Psyhos	Dave Richardson
<b>April 27</b>		<b>Work Party #4</b>
April 27	Dave Prowten	Gary Walker
May 4	Rich Burrier	John Panaswich

THE LAST clubhouse work party went well. We started the "remodeling" of the near barn in preparation for eventually moving the machine shop, and perhaps the rough grinding function into it. Both insulation and framing was added to the back wall and half of the west wall. We plan to continue this at the next work party on March 30th. Once this is complete, we will work on the east side barn door and make it weather tight. As the warmer months approach, we will continue the work on the observatory. Thanks to: WELCOME BENDER, JOHN BLONQUIST, DICK KOOLISH, GARY LAMBERT, JOHN PANASWICH, DAVE PROWTEN, DAVE SIEGRIST, and ART SWEDLOW.

*-Paul Cicchetti and John Reed-*

## Astronomy Events Calendar 2002...

April 6	StarConn	Wesleyan University Middletown CT
<b>April 20</b>	<b>Astronomy Day</b>	<b>Boston Museum of Science</b>
May 18-19	North East Astronomy Forum & Telescope Show	Rockland NY
<b>June 15</b>	<b>ATMoB Club Picnic</b>	<b>Clubhouse Westford MA</b>
<b>July 3 - 14</b>	<b>ATMoB Camping</b>	<b>Baxter State Park, Maine</b>
July 12-14	Arunah Hill Days	Cummington MA
August 9-10	Stellafane	Springfield VT
September 6-8	Connecticut Star Party	Colebrook CT
September 6-8	Conjunction	Northfield MA
<b>September 14</b>	<b>ATMoB Club Picnic</b>	<b>Clubhouse Westford MA</b>
October 5	Astro Assembly	North Scituate RI
October 25-26	AAVSO and International Dark-Sky Association Fall Meeting	Boston

## StarConn 2002...

STARCONN IS a day-long convention, including vendors, held Saturday, April 6 at Wesleyan University in Middletown, CT. Admission cost is \$12.00 until March 15<sup>th</sup>. Registration on the day of the convention is \$14.00. The registration form is available online at <http://home.cshore.com/rfroyce/starconn2002/>

The keynote speaker will be Dr. Tim Brown of the High Altitude Observatory, National Center for Atmospheric Research. He will speak on the remarkable discovery of not only a trans-solar planet, but the nature of that planet's atmosphere: "The STARE Project and the discovery of a Planetary Transit Across Star HD\_209458".

Registration at 8:30AM. The convention opens at 9AM.

William Zmek *Fine Tuning the Hubble Fine Guidance System*

Stefan Immler *High Energy X-ray Emissions from Small Galaxies*

Alyssa A. Goodman *Mapping the Interstellar Medium*

Gregory Tucker *Resolving Cosmology by Measuring the Cosmic Microwave Background*

Tom Weil *Looking Back Cosmologically*

Buffet Dinner: Downey House - Optional on campus dinner buffet is offered at \$25.00 per person

Keynote speaker Tim Brown

*After Dark* Observing with the Van Vleck 20" refractor.

A number of ATMoB members attend this convention.

Contact JOHN REED or EILEEN MYERS if you need a ride.

*-Eileen Myers-*

## Star Party Thank You's...

MY THANKS from all the kids and teachers at the Cummings School. Our star party on January 22<sup>nd</sup> was everything anyone could ask for. Lots of enthusiastic kids and parents enjoyed excellent viewing under the city sky. We gave that community a great show, and everyone should take a lot of satisfaction in that. Once again, my personal thanks to: TOM CALDERWOOD, MICHAEL CARNES, KATHY CUNNINGHAM, MIKE EIRMAN, LEW GRAMER, JOHN HOPKINS, RICHARD KOOLISH, HOWARD LEVAUX, and JOHN REED.

*-Lou Cohen-*

I'VE CANCELLED star parties only to stare at clear skies that night. Then I was sure we'd have a clear night and got totally clouded out! We may be asked to try again soon, and I hope you'll be available. My thanks go to all the astronomers who came out and showed the kids the night lights of Boston's skyline: MICHAEL CARNES, KATHY CUNNINGHAM, JOHN HOPKINS, DICK KOOLISH, JOHN REED and PAUL WAGONER. I hope I haven't forgotten anyone.

*-Lou Cohen-*

A FANTASTIC star party was held at the Wilmington Middle School. It was scheduled to end at 8PM, and just in time too: there was not a single star left to observe – by 8PM it had all clouded over! Five ATMoBers helped out: BOB COHEN, JACK DROBOT, CHARLIE MCDONALD, PETER PSYHOS, and BILL TOOMEY (lecturer). Friends of the club Matt Cilento and Tim Murphy also brought their telescopes, as did three parents and two high school students. There were 125 in attendance. The next day the star party was the talk of the school. Because of the high enthusiasm, the school principal has decided to purchase additional equipment for the school's science department.

*-Charlie McDonald-*

## Upcoming Star Parties...

I'm scheduling a make-up star party for a fourth grade group from Winchester. We were clouded out in the Fall. The plan is to hold the event on Thursday March 21, at 7:30 with the cloud date of Friday March 22. It will be held at Mullen field at the Winchester/Arlington line. I will be able to forward directions to anyone who might help out at this event. My E-mail at work is [steveclougherty@ssa.gov](mailto:steveclougherty@ssa.gov). My work tel#. 617-654-7820, and home, 781-784-3024. Thanks so much!

*-Steve Clougherty-*

JACK DROBOT (one of our few members without E-mail) is planning a star party at the Morey School in Lowell on Thursday, March 21. He will need about 15 scopes to assist with this event. If you can help Jack, please call him at 978-692-8093 to let him know. The Morey School is located on Pine Street, just off Stevens Street in Lowell. You will be able to park very close to the setup zone. Set up is 6:00 to 6:30 and the children will be out 6:45 or so from BILL TOOMEY'S talk. If you are unable to reach Jack by phone, leave an E-mail with John Small at [jsmall@ma.ultranet.com](mailto:jsmall@ma.ultranet.com)

Jim Zebrowski of the Aldrich Astronomical Society needs our help for an April 2<sup>nd</sup> astronomy program and star party for 6<sup>th</sup> graders at the middle school in Grafton. Jim can be reached at [jjz@ma.ultranet.com](mailto:jjz@ma.ultranet.com) ATMoB members BRUCE BERGER, ROGER

GREENWOOD and JERRY SKALA have already offered to help out.

GARY JACOBSON and I are helping to co-sponsor an Art and Astronomy month at the Chelmsford Library. Events are planned for the whole month of May. Included are 2 star parties, astronomers from Haystack Observatory doing a demo of an SRT (radio telescope), and solar viewing featuring members of the ATMoB who will have telescopes in the library's parking lot for safe viewing of the sun. There will also be a "Telescope Clinic and How to Buy a Telescope" session, providing an opportunity to talk with the experts from Sky & Telescope, the Writers' Quarterly Series presenting Chet Raymo, and Kelly Beatty, "What's Up with Our Sky???", discussing the important topic of light pollution. The full schedule is at

[http://www.chelmsfordlibrary.org/programs/events/art\\_and\\_astro\\_nomy.html](http://www.chelmsfordlibrary.org/programs/events/art_and_astro_nomy.html) We will need a lot of club volunteers to help out at the different events. Please note that I have a new E-mail address: [berger@attbi.com](mailto:berger@attbi.com)

*-Bruce Berger-*

## Messier Marathon Observing Report...

ABOUT A dozen hardy souls spent the night of Saturday, February 9<sup>th</sup> until about 1:30 AM Sunday morning searching the skies for Messier objects. Everyone had a chance to look through STEVE MOCK's 25" at a variety of deep sky objects. Both showpiece objects along with lesser known deep sky objects, primarily NGC and IC planetary nebula, were seen by almost everyone. Jupiter and Saturn were also studied, and we got a chance to see the developing white spot adjacent to the great red spot which crossed the central meridian at 10 PM. JOHN REED started the evening by locating Supernova 2002ap in M74 (mag 12.3). See this website to help locate the supernova:

<http://cfa-www.harvard.edu/cfa/oir/Research/supernova/images/sn2002ap.gif>

John also spent some time looking for the closest of Saturn's brightest satellites, Saturn's inner moon Enceladus (mag 11.8).

*-Steve Clougherty-*

## A Near Occultation of Saturn...

I PARTICULARLY enjoy observing transient events (meteor showers, eclipses, occultations, etc.) and was very much looking forward to the February 20<sup>th</sup> occultation of Saturn. I then realized that it was occurring during school vacation week, while I would be vacationing in St. John with my family. To my chagrin, the chart in *Sky & Telescope* indicated that the southern limit of the occultation was just north of the Virgin Islands, and I regretted that I would be missing the event.

I decided to bring large binoculars on the trip anyway to observe some of the southern objects, including Eta Carinae and Omega Centauri. On the evening of February 20<sup>th</sup> I also watched as the Moon gradually drew closer to Saturn. It surely looked like it couldn't miss, despite the predictions. It was partly cloudy and for a while I observed through holes in the clouds, but as closest approach came, most of the clouds disappeared. Saturn came closer and closer to the non-illuminated side of the first quarter moon. Finally, at 9:26 PM (St. John is 1 hour ahead), the southern terminator of the moon passed within a ring diameter of Saturn. It was a striking sight to see Saturn gliding by so close to the lunar

craters, and in some ways more so than an occultation, because it lasted many minutes instead of seconds. I had missed the occultation, but had no regrets. *-Joseph Rothchild-*

## Obituary...

### George A. Wood, Jr., past-President and Secretary of ATMob, and his wife Nancy Wood

George A. Wood, Jr., club member from 1960-1985, Club Secretary 1963-1965, and Club President 1965-1967, passed away on February 18th. His wife Nancy passed away three days later. Included below are recollections from Dino Argentini, some extracts from the Club History, written by Club Historian Anna Hillier, and the Obituary written in the Boston Globe.

Around the time of incorporation the club members were invited to monthly star parties at the home of George and Nancy Wood. Nancy was always the gracious hostess providing home baked cookies and cocoa. George was a former secretary as well. We were both active as judges for many years at Stellafane. Dino E. Argentini, Club Secretary 1965-1968

Extracts from **The Early Years** "THE HISTORY OF AMATEUR TELESCOPE MAKERS OF BOSTON" compiled and collated by **Anna Sudaric' Hillier, Historian**

3/27/84 Visited the home of George Wood with Adrian Levesque. George presented us with a box containing a lot of records which he had accumulated during the eighteen years in which he was active in the club. These years would be from 1961 to about 1978.

George was part of a group of four who formed the kernel of the club during those years. As a mechanical engineer working for Arthur D. Little, George met Fred Chellis who was also at that company. Fred introduced George to Dino Argentini at the club. The last of the four was Joe Blais. These members made the club very much into a family-oriented organization which stressed teaching and observing. Observing sessions were held twice a month, once at George's house in Lincoln and the other at a different location. Sessions were also held at George's summer house in Marshfield, Joe Blais' house in Wolfeboro, and at Mt. Cardigan. The Mt. Cardigan sessions came about because Ed Jameson knew the current keepers of the house and lodge and these keepers invited ATM members to provide an annual program for the regular AMC guests. (Ed Jameson was teacher at the Natick Planetarium and former director of the Museum of Science Planetarium.) Most of the outings, however, were more local.

Just before George joined the club, (1957-60), there was a split caused by the Moonwatch program. The president at that time pressured members into participating in Moonwatch and had even fired the shop director for some unknown reason. As a result, the South Shore Astronomical Society was set up and many non-observers joined that society. Jim Gagan receives the credit for pulling the club back together, but for many years 'observing' was a naughty word in the club. The reconstructed club emphasized

telescope making, and with the close relation to the Baker lab and Itek, were actually amateurs doing professional quality optical work. When George Wood incorporated the club in 1966, he was surprised to find that members objected to any reference to observing in the charter.

The incorporation was done with the assistance of Richard Davis, who is still the lawyer for AAVSO. Richard handled all of the business except for the acquisition of tax-free status. This status proved to be a difficult goal primarily because of the roadblocks that the government uses to keep down the number of tax-free organizations. Mr. Davis did not have the time to keep on top of the matter until it was pushed through.

The 20" telescope was a project that was not worked on during Wood's time. Occasionally, a member would pick up the project and play with it for a while, but then drop it. George feels that the club was too family-oriented to allow for sufficient devotion to a collective project. Members were too interested in their own telescope projects to devote time to a club telescope. At the time that George joined the club, the shop was in a former boathouse located on a dock in back of the Museum of Science and adjacent to the canal locks. Fred Chellis had the key to the shop, so Fred and George could go down early for extra work on their own projects. The club lost the building when the museum needed the space to set up an exhibit of natural history. From there, the shop moved to Bernie Forest's place in Arlington but the quarters were quite cramped. Next, the club moved to the Schwamb mill but was soon evicted because the club's activities were "not sufficiently archaic". Half of the material was stored in George's garage and the other half at other locations. For a while, the club was going to use a building at the Audubon sanctuary at Drumlin Farm, but the daughter of the donor of the land insisted on restricting the use of the property for sanctuary purposes only.

Aug 30, 1973 Observing at George Wood's house in Lincoln (monthly).

Jun 21, 1974 Eviction notice from the Schwamb Mill, effective Aug 31, 1974. (Got one month's delay.)

Jul 25, 1974 Proposed use of building on site of U.S. Army Nike Base at Drumlin Farm by George Wood

Sep 23, 1974 Shop materials moved to George Wood's house in Lincoln

#### Under OUTINGS

George Wood's Summer House in Marshfield, MA July 1, 2 1967

## GEORGE AND NANCY WOOD, 77 LINKED IN BIRTH, LIFE, AND DEATH

From *The Boston Globe*

**Author(s):** Tom Long, Globe Staff

**Date:** February 26, 2002

**Page:**C1

**Section:** Obituary

George Alexander Wood Jr. and Nancy (Seymour) Wood could have stepped out of a Norman Rockwell painting. He was an

engineer. She was a bread baker of local renown who quit work for 25 years to raise the couple's three children. They met at a church social and were married by her father, a Congregational minister. He was a Boy Scout leader; she led a Girl Scout troop. They were born 14 days apart and, after 53 years of marriage, died within three days of each other.

"They both had a wonderful 77 years," their son, Gordon, said yesterday.

Mr. Wood died Feb. 18 in the Sunbridge rehabilitation facility in Concord. Mrs. Wood died three days later in their home in Lincoln. He had Alzheimer's and Parkinson's diseases. She had cancer that started in her tongue and traveled through her body. She was only expected to live for another month and thought she would precede her husband in death.

When her daughters told her that her husband had died, she said: "Now I don't have to worry what he's going to do when I die," and made arrangements to have her feeding tube removed.

"They were full people as individuals and very connected as a couple," their daughter Cynthia Peavoy said yesterday. "It was almost as if they were from a different era."

In addition to Gordon of Lincolnshire, Ill., and Cynthia of Maynard, the Woods leave daughter Betsy Budd of Marshfield, as well as six grandsons. Mrs. Wood also leaves three siblings, Richard and Robert Seymour and Catherine Nelson.

A memorial service will be held at 1 p.m. today in First Parish Church in Lincoln.

Mr. Wood, who loved airplanes, was born in Cambridge and raised in Belmont. He piloted B-25 bombers in Italy during World War II and also designed airplanes for a time.

A graduate of the Massachusetts Institute of Technology, Mr. Wood was a consultant for many years at Arthur D. Little Co., where he designed and built more than 50 machines, including contraptions that assemble Devil Dog chocolate cakes and fill plastic bags with popcorn. He later worked as an engineering consultant with Foster Miller Associates before founding his own consulting business in 1979.

Mrs. Wood, born in Sunderland, graduated from Boston University and earned a master's degree in clinical psychology at Ohio State University. She became a psychologist at Metropolitan State Hospital in Waltham after spending 25 years at home raising her children. She worked with chronically ill patients for 13 years, and after the hospital closed volunteered her time with the Alternative to Violence program at Concord State Prison.

The two were married by her father, the Rev. Frank C. Seymour, on June 26, 1948.

In 1953, the couple built their home in cooperation with a local builder. Each afternoon when the contractor left, he'd leave behind

a note tacked to a board with the evening's tasks. They nailed studs, hung drywall, and laid flooring.

"It's a very solid house," said their son.

Both were active at First Parish. "If there was something to be done they did it, and never gave it a second thought," daughter Betsy said yesterday. "Everything from collecting hymnals after services to picking up coffee cups."

Mr. Wood enjoyed woodworking and once built Bible racks for his church. **He also enjoyed astronomy and was the former president of the Amateur Telescope Makers of Boston.**

Late in life, when his wife was doing her volunteer work and he was attending church services alone, he relished replying to congregants who asked after his wife, "She's in prison . . . again."

Mrs. Wood was an accomplished cook whose sold her bread locally. Her son described her as adventurous in the kitchen. "We had tofu hamburgers 25 years ago," he said. Mr. Wood, who loved gadgets, filled the kitchen with blenders, can openers, and other appliances, including an early microwave, "as big as a car," Gordon said.

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## Other News...

ATMOB MEMBER MATT BENDANIEL will be speaking about astrophotography on the following dates:

March 1 Astronomical Society of Northern New England

May 25 Royal Astronomical Society of Canada

August 9 Stellafane

August 24 AstroImage Conference, Los Angeles (tentative)

Congratulations, Matt!

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**April Fool's *Stare Fields* deadline is Sunday, March 24<sup>th</sup>**

**April *Star Fields* deadline is SUNDAY, March 31st**

**Email articles to Star Fields Editor / ATMob Secretary**

**Eileen Myers at [starleen@charter.net](mailto:starleen@charter.net)**

**Articles from members are always welcome.**

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**POSTMASTER NOTE: First Class Postage Mailed March 8, 2002**

Amateur Telescope Makers of Boston, Inc.  
c/o John Small, Membership Secretary  
9 Bear Hill Terrace  
Westford MA 01886-4225

**FIRST CLASS**

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**How to Find Us...Web Page [www.atmob.org](http://www.atmob.org)**

**MEETINGS:** Held the second Thursday of each month (September to July) at 8:00PM in the Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA. For INCLEMENT WEATHER CANCELLATION listen to WBZ (1030 AM)

**CLUBHOUSE: Latitude 42° 36.5' N Longitude 71° 29.8' W**

The Tom Britton Clubhouse is open every Saturday from 7 p.m. to late evening. It is the white farmhouse on the grounds of MIT's Haystack Observatory in Westford, MA. Take Rt. 3 North from Rt. 128 or Rt. 495 to Exit 33 and proceed West on Rt. 40 for five miles. Turn right at the MIT Lincoln Lab, Haystack Observatory at the Groton town line. Proceed to the farmhouse on left side of the road. Clubhouse attendance varies with the weather. It is wise to call in advance: (978) 692-8708.

**Heads Up For March..**

*To calculate Eastern Standard Time (EST) from Universal Time (UT) in March subtract 5 from UT.*

Thurs Mar 14 5:13 UT Double shadow transit on Jupiter  
Wed Mar 20 2:16 EST Spring or vernal equinox. The Sun, appearing to travel along the ecliptic, reaches the point where it crosses the equator into the northern celestial hemisphere.

Thurs Mar 21 7:08 UT Double shadow transit on Jupiter  
Thurs Mar 28 10:14 UT Double shadow transit on Jupiter  
Thurs Mar 28 Full Moon (Sap Moon, Crow Moon, Lenten Moon)  
Moon at perigee. Distance 56 earth-radii. Very high tides due to coincidence of perigee with full Moon.

Four evening planets: Venus (mag -3.9), Mars (mag +1.3 to +1.5), Saturn (mag +0.1), Jupiter (mag -2.4 to -2.2). The Moon overtakes all four planets March 14-22.

Comet Ikeya-Zhang continues to brighten: mag 5.3 to mag 3.5 in March. Look for it in Pisces. See <http://skyandtelescope.com/> for link to star chart and details.