

# aslc bulletin

# ASTRONOMICAL SOCIETY of LAS CRUCES New Mexico

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### FEBRUARY - MARCH 2004

THIS MONTH - February [Steve Barkes]

**Regular Meeting; February 27**; 7:30 PM, Room 77 of the Dona Ana Branch Community College **Program** *Steve Barkes* "*The Messier Marathon: For Fun and Profit*". Basically a history of the marathon, how to prepare, etc. This will be a good lead-in for our several March events (see Calendar and past issues), and will hopefully get more observers out under our dark skies. Excellent timing for those newbies who want to fully participate in this and start getting ready early enough to be fully prepared. Providing info & enthusiasm early on should encourage members & their families and make this thing more successful as a social event also. *Steve Barkes - Nils Allen* See <a href="http://www.astroleague.org/al/obsclubs/messier/mess.html">http://www.astroleague.org/al/obsclubs/messier/mess.html</a>

**Business** *Vote on Dues Increase* As was mentioned at the January meeting, the Board of Directors (BOD) has recommended a dues increase for the ASLC. The increase is needed to cover the increased dues for membership in the Astronomical League, and continued spending for our club. Beginning the first of the year, AL dues for each member was increased by \$1.50 per year. If we want to continue to support the astronomical community at the same level we have in the past, the ASLC dues must be increased as well.

In order to increase the dues, this issue must be brought up as a formal motion at a club meeting, and voted on, and approved by a least 20% of the membership. Given this, I hope that we can get a good turnout for the February Meeting, establish a quorum, and put this to a vote. See "News & Views" for fiscal details. Thanks for your support! *Steve Barkes;* See also: "Looking Ahead" - "Rising Skies" below.

### LAST MONTH - 2004 INAUGURAL MEETING: January [ Howard Brewington ]

**Program** Howard Brewington **Comet Hunting the Old Fashion Way**; Visual comet hunting. Howard disclosed the procedures used to find the five comets which bear his name. He talked about the telecopes that he built for comet hunting, as well as the evolution on his comet hunting methods during the ten years he spent scanning the night skies. A fascinating contrast to todays digital imaging methods.

## **NEXT MONTH - March** [Joseph Mancilla]

**Regular Meeting; March 26**; 7:30 PM, Room 77 of the DABCC **Program** *Joseph Mancilla* **Planetary Drawing at the Eyepiece**.

See: <a href="http://www.cometman.net/alpo/">http://www.cometman.net/alpo/</a>

Learn to hone your observing skills with this approach which focuses your attention to detail. Joseph will discuss how to use techniques and tools developed for the *ALPO Training Program* in which he is a participating trainer.

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### **LOOKING AHEAD**

April: "Rising Skies" Understanding Astronomy through the Arts 2<sup>nd</sup> Annual Astronomy Exhibition Las Cruces Museum of Fine Art April 1 ~ 28, 2004

The Rising Skies Program introduces primary and early secondary school students to the artistic aspects and historical elements of astronomy. Through visual arts projects coupled with science-based experiments, students create simple tools and aesthetic visions of the cosmos. This year's program focuses on the sun, with classical depictions, archeo-astronomical sites, and current solar instruments. The museum exhibit will feature an artistic range of subjects that include star charts, nebulae images, planets, (including Mars), galaxies, science-fiction/science fact, and related astronomy information. Here's where ASLC Astro-

photographers can help. I would like to include a small section of local astro-photographer's works. Due to the small area of the gallery, I'd like a few images from local astronomers for the exhibit, framed and ready to hang, with information concerning the subject. If there is a favorable response, and the works exceed the allocated space, there may be an opportunity to display framed works in the museum hallways. If you would like to participate, please contact me at the Museum. \_Timothy Billman 505.541.2160 Fax: 505.525.3645 timothyb@las-cruces.org



May: The 2003 apparition of Mars; ALPO Executive Director Richard Schmude, Jr. is visiting Las Cruces in May. It was a complete surprise, though a very pleasant one, when Cecil Post told me that Richard Schmude will come to Las Cruces and has offered to talk to the ASLC about the 2003 apparition of Mars. He is an enthusiastic and very knowledgeable speaker. He teaches at Gordon College in Georgia. In the ALPO he is Coordinator for the Sections on Jupiter and also the Remote Planets (those beyond Saturn). Walter Haas

July: 2004 ASTROCON 20-24 July (Preliminary Announcement)

Mark your calendars! A truly once-in-a liftime conjunction of the Astronomical League, the American Association of Variable Star Observers, the Association of Lunar and Planetary Observers, and the Astronomical Society of the Pacific will be held on the campus of Mills College in Oakland, California. This first of its kind meeting of these organizations will be held 20-24 July 2004 and is being co-hosted by the Astronomical Association of Northern California and the Eastbay Astronomical Society. Mike Bennett, Director of the ASP and Mike Reynolds, ALPO Board member and Executive Director Emeritus of the Chabot Space & Science Center in Oakland, are co-chairing the meeting.

The AstroCon 2004 focus will be on observational astronomy and public outreach. A number of field trips are planned, including one to Lick Observatory, home of the 36-inch Clark Refractor and 120-inch Shane reflector, and a barbecue and observing at Chabot with the 8-inch Clark and 20-inch Brashear refractors and Chabot's new 36-inch Cassegrain. And, of course, a number of vendors displaying the latest and greatest in telescopes and accessories will be a part of AstroCon 2004. See: <a href="http://www.astrocon2004.org">http://www.astrocon2004.org</a> and <a href="http://www.lpl.arizona.edu/~rhill/alpo/astrocon2004/astrocon2004.html">http://www.lpl.arizona.edu/~rhill/alpo/astrocon2004/astrocon2004.html</a>

### **NEWS & VIEWS**

### **Vote on Dues Increase for February Meeting**

As was mentioned at the January meeting, the Board of Directors (BOD) has recommended a dues increase for the ASLC. The increase is needed to cover the increased membership dues in the Astronomical League, and continued spending for our club. Beginning the first of the year, AL dues for each member was increased by \$1.50 per year. If we want to continue to support the astronomical community at the same level we have in the past, the ASLC dues must be increased as well. Below is partial listing of some of the club expenses which is to be funded by member dues. This budget information was prepared by the BOD and was used to try and determine how much of an increase would be necessary. The final, and formal, budget for the ASLC will be presented at the July meeting in accordance with the club's bylaws.

Printing/Postage of Bulletin	514.25	PO Box Fee	48.00
Safe Deposit Box Rent	24.50	IDA Dues	50.00
Liability Insurance	327.00	Astronomical League Dues	460.00
NM Public Regulation Filing Fees	10.00	Astronomy Day Booth Rental	20.00
Public Outreach	250.00	General Printing (flyers/brochures)	150.00
Misc. expenses	200.00	Capital Expenses (Dome Repair, etc.)	450.00
Minor Planet Plaque for City of LC	50.00		

As you can see from the information above, a large portion of our expenses is attributed to postal delivery of the club newsletter. It costs about \$10.20/year/member to deliver the newletter by USPS mail. With this in mind, our recommendation is that dues increase from \$28.00/year to \$35.00/year. If a member is willing to take electronic delivery of the newsletter via email, a discount of \$5.00/year would apply. So a one year membership would be \$35.00 with postal delivery, or \$30.00 with electronic delivery.

In order to increase the dues, this issue must be brought up as a formal motion at a club meeting, and voted on, and approved by at least 20% of the membership. Given this, I hope that we can get a good turnout for the February Meeting, establish a quorum, and put this to a vote.

Thanks for your support! Steve Barkes; President

### **Developments in Future Programming**

### 1) Stardate on KRWG-FM

I have done some research into the cost of underwriting "Stardate" on KRWG. Their underwriter has sent me some quotes on what we would get and what it would cost us. The prices were from \$300 - \$400 all the way up to \$1200 depending on how many shows per week of 19 we wanted to do, also there was a cheaper charge for doing only half the year. For the money they give us an 8 second spot where they would say "This segment of "Stardate" was brought to you on KRWG 90.7 by the Astronomical Society of Las Cruces."

This is a lot of money! However I know of several members that already contribute to KRWG and possibly we could set up a fund in ASLC where those donations could go through us to sponsor this. I would kick in \$100 and if we could get a few more, then this would be a very feasible thing to do. Please let me know what you would be willing to put to this fund.

Richard Jones

## 2) Field trip to the NRAO - Very Large Array (VLA)

We are planning a field trip to the VLA for April 3rd. We will meet in the Lowes Parking and carpool/convoy leaving from there at 10:00 AM. We will plan a stop in Socorro for lunch and then drive on to the VLA. We are setting up a special guided tour at the VLA with plans for it to start at 2:30 PM. If you would like to go up seperately from the convoy/carpool, then meet at the VLA visitors center not later than 2:30 PM.

For Planning purposes, we need to have an idea of how many people plan to go on this field trip. Please let me know either by e-mail to richard@aslc-nm.org or calling 523-4449 (leave a message if I am not there).

## ASLC Now Deeper into the 21st Century New Website - New Location

We have made a big move these last weeks from our www.zianet.com/aslc website to our own domain and website at www.aslc-nm.org. Most of the website is as it has been, but there are some new features added and some other new ones on the way. We have added a Guestbook where our members and visitors can leave us some kind words when they visit.

There is now a Chat Area where you can sit and chat on-line with anyone else that happens to be there. Not many people know about this now, so if you really want a chat, you should make appointments with people to meet you there.

If you would like to have an email@aslc-nm.org address, let me know and we can set one up for you. You will still have to find a provider to get on-line though. To sign up for the e-mail account, send me an e-mail at webmaster@aslc-nm.org or call me. Send me the LOGIN name you want and a password.

Coming soon are "Restricted" areas for our members with our e-mail address. Some things that will be there are the By-Laws(currently posted on the page), there will be a chatroom just for members and a bulletin board for members. There will also be a restricted area for the BOD and one for Instructors of our courses as well as one for the students in our courses.

Thanks Richard C. Jones

**Webcam Imaging Workshop:** The schedule for the upcoming workshop has been finalized. I've made arrangements to use JD Flours for two sessions; March 11th and April 8<sup>th</sup> from 7 to 9:00pm. Participants need to bring the following:

- 1. Webcam (with adapter)
- 2. Portable computer
- 3, Telescope you can easily setup in the Flours parking lot
- 4. 2 or 3x barlow lens (for session 2)
- 5. At a minimum you will need image/AVI capture software (this should have come with your webcam.)

If you're using a Windows PC, we highly recommend that you download and install K3CCDTools and Registax2. Both programs are free and we'll be using them extensively for image capture and processing. See: http://www.pk3.org/Astro/ and http://aberrator.astronomy.net/registax/index.html for download.

MAC users should use either the software that came with their video camera or BTV Pro (shareware/\$40) for image capture. The basic version of BTV may also be used (shareware/\$20). Image alignment, stacking and processing can be accomplished with Keith's Image Stacker (shareware/\$10). Adobe Photoshop, while expensive, is an outstanding program for doing image processing, although there are alternative (less expensive) image processing programs available such as Graphic Converter. For information and downloads, see: http://www.bensoftware.com/ <a href="http://www.unm.edu/~keithw/software/keithsImageStacker.html">http://www.unm.edu/~keithw/software/keithsImageStacker.html</a> <a href="http://www.adobe.com/http://www.lemkesoft.de/en/graphdownld\_en.htm">http://www.lemkesoft.de/en/graphdownld\_en.htm</a>

I would like for everyone to have the software installed and webcams running before the first session. Please call me (541-0717) or email if you need a hand with anything.

If you would like to participate in the workshop but are lacking something in equipment, contact me and we may be able to provide it or possibly team you up with someone. Contact me ASAP if you want to participate and are not on the list. We're planning for around 15 imagers and if we don't get any more ASLC signups in the next week or so, I intend to invite members of the Alamogordo Astronomy Club that are interested. As of publication, I have following people signed up: Richard Jones; Rich Richins; Walt and Marion Seibyl; Vince Dovydaitis; Rich Loose; Bob Oheim; Leon Silverstrom; Robert Yearley; Steve Smith

### Workshop Outline Session One (Basic Imaging)

- Web camera discussion
  - o Frame rate and video compression
  - AGC and manual gain settings
  - Shutter speed vs. seeing conditions
  - White balance
- Discussion of scope alignment, tracking, and focusing
  - Magnification and tracking
  - Drift imaging vs. tracking
  - Focusing demonstration
    - Using Lunar limb or feature
    - Using a Hartman mask and nearby bright star
- Demonstrate operation of K3CCDTools

Walt Seibyl with his son Jim and their New Observatory

- Overview and history
- Main features and settings
- How to capture images and AVIs
- How to save and open files
- Equipment and software setup (outside)
  - o Set up PCs, cameras, adapter, telescopes
  - Install K3CCDTools software and camera drivers get everything working to the point of seeing lunar images on the PCs
- Exercise Capture a lunar AVI file using K3CCDTools
  - Set best camera levels and focus
  - o Capture a video sequence of the moon (favorite feature or drift capture)
  - Save the sequence
  - o Find several individual frames of interest and save them as BMP files



### Session Two (Planetary Imaging and Processing)

- Discuss magnification vs. seeing
- Discuss imperfections on the CCD surface and solutions (cleaning, flat fields, stacking, etc.)
- Review focusing and cut out Hartman masks for all telescopes
- Planetary Imaging (outside)
  - Set up all equipment (include a Barlow lens. Note: you should have a tracking mount for this session)
  - o Ensure telescopes are accurately aligned for tracking at hi magnification
  - Have everyone use a simple Hartman mask and focus using a nearby star
  - Have everyone set levels and capture an AVI using K3CCDTools
- Stacking and sorting (back inside: people can work along with their laptops)
  - Demonstrate the planetary wizard in K3CCDTools
  - o Have everyone walk through the wizard with the best of the captured AVI's
- Image processing
  - Demonstrate how to save the best sorted frames and load into Registax2
  - o Demonstrate histogram stretching
  - o Demonstrate Registax 2 and wavelet sharpening



Subject: [aslcnm] Rosette Nebula

From: "Dave Dockery"
Date: Mon, 16 Feb 2004
dave.dockery@zianet.com

It's a little late for Valentines but I wanted share a rose I captured last night with you all. This was taken from my backyard (in town) using a Light Pollution Suppression (LPS) filter and a H-Alpha filter with my TV85 and Canon 300D. As much as I love going out to Upham, it may start getting harder to convince me to make the trip. ;-)

See:

http://www.zianet.com/dave.dockery/Rosette.

Great Features Untapped in Yahoo! Lists - aslcbod & aslcnm! The website <a href="http://wwww.yahoogroups.com">http://wwww.yahoogroups.com</a> will list the groups to which you belong. Click on "aslcbod" and/or "aslcnm" and look in the column on the left for a link to messages. All group messages are listed there. Here you have access to what has transpired. You can use the link "Edit my membership" in the upper left corner to change your settings as to how you get the messages. You can get individual messages or a day's worth at a time or not at all if you prefer to read from the website. And there are other great features to this utility that we've not begun to use.

### **ASLC OFFICERS 2004**

PRES. Steve Barkes	647-8270	V PRES. Rich Richins	646-5169
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PAST Pres. Richard Jones	523-4449	DIRECTORS: A.Scott Murrell	; John McCullough
Richard.Jones@zianet.com		EMERITUS: Walter Haas; Je	ed Durrenberger

### **MEMBERSHIP** in the ASTRONOMICAL SOCIETY of Las CRUCES, offers:

Frequent observing sessions and parties; Opportunities to work on club and public educational projects and the ASLC Bulletin, our monthly newsletter, plus the quarterly A.L. Reflector, newsletter of the Astronomical League. Also, as an ASLC member you are entitled to the 10% club discounted rate on Sky and Telescope magazine. To join the ASLC, or renew membership; your dues are only, \$28.00 per year. The optional club discounted Sky and Telescope presently adds \$33.00, for a total of \$61 per year. At either rate, mail your dues, \$28 or \$61 per year, payable to A.S.L.C., along with a note or an application form to:

### Treasurer ASLC, PO Box 921, Las Cruces, NM 88004

Sky &Tel. subscribers MUST submit their renewal through the Society Treasurer for the special club rate. To avoid a lapse in delivery, this must be done when S&T sends their reminder, 4 months in advance. Members so equipped are encouraged to receive this BULLETIN electronically.

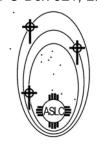
The product is superior to the USPS version, and it saves money for other Society outreach activities.

### CALENDAR February - March 2004

Feb 20/Fri	New Moon Sunset approx. 6 pm MST		
Feb 21/Sa	Dark Sky Saturday Upham DSO site.		
Feb 27/Fri	Regular Meeting 7:30 DABCC Rm 77 Steve Barkes Messier Marathon; Fun & Profit?		
Feb 28/Sa	Moongaze International Delights Cafe		
Mar 2 -May 4	StarGazing under New Mexico Skies DABCC Course #hl102 East Mesa campus		
Mar 10 -Apr 1	O Telescope Making Workshop. Apply now to aslc@zianet.com, or 522-1456		
Mar 13/Sa	Public Star Party La Llarona Park		
Mar 20/Sa	Equinox / New Moon / Dark Sky Saturday Upham DSO site. Sunset approx. 6:20 pm		
Mar 26/Fri	Regular Meeting 7:30 DABCC Rm 77 Joseph Mancilla "Planetary Drawing"		
Mar 27/Sa	Moongaze International Delights Cafe		
Looking Ahood			

Looking Ahead				
Apr 24/Sa	International Astronomy Day http://www.astroleague.org/al/astroday/astroday.html			
May 16-23	Texas Star Party http://www.texasstarparty.org/			
May 28/Fri	Regular Meeting Dr.Richard Schmude, Jr. Exec.Dir.ALPO "2003 Apparition of Mars"			
June 12-19	Grand Canyon Star Party http://www.tucsonastronomy.org/gcsp.html			
July 20-24	2004 ASTROCON See announcement in "Looking Ahead"			

**ASTRONOMICAL SOCIETY** of Las Cruces, New Mexico PO Box 921, Las Cruces, NM 88004



### **ASLC BULLETIN FEBRUARY- MARCH 2004**

Please review your expiration date. - Sky subscribers should renew 4 months in advance to avoid subscription lapse.