



THE

Prairie Astronomer

Volume 34 #4

April 1993

4-93

PRESIDENT'S MESSAGE

by Dave Knisely

Mark you calendars for Saturday, May 1st (yes, it is Astronomy Day, but we have something else in mind). This is the final cleanup of the Atlas site before the convention's star party, and after the hard winter we have had, the site sure needs it! We also should have the convention registration materials at the next club meeting, so if you want to register early, now is the time. [Also note that registration materials have been sent with this month's newsletter]

If you are thinking about helping with the convention, you should still register, since you will be attending it as well. Registering and attending will also help us financially, and will show the other clubs and individuals attending just how active our little group is. In observing news, a new supernova has been spotted in the bright spiral galaxy M81 (see photo). Its location is in the outer southwestern portion of the galaxy, and at peak magnitude it was 10th, making it an easy target for small telescopes. Get out now to observe it, because it will be fading fast.

See you at the meeting.

CD-ROM Drives

(Part 2)

by Rick Johnson

Dell, Tandy and others already have several models in their lines. Software firms find CD-ROM the cheapest way to distribute their software and it is in effect copy-proof. Either due to sheer size in the case of Corel Draw's full package or because it can run only from CD-ROM in the case of much educational Multimedia software.

A machine capable of writing to blank CD-ROMs cost \$7000 and up so the average user can't duplicate it for others to use. Yet CD-ROM is a far safer media than floppy disk as it is hard to ruin other than by applying sandpaper or melting on a hot surface.

What CD-ROM drive should you get? If you have kids you will definitely want one that is Multimedia compatible as most of the really good educational programs are ONLY available on Multimedia CD-ROMs. These include encyclopedias that demonstrate by talking movies exactly what was read in the text, National Geographic Mammals that is an entire encyclopedia devoted to Mammals with over an hour of motion pictures as well as sound and text devoted to just about every Mammal that is not extinct. Educational games such as the Deluxe version of Where in the World is Carmen Sandiego not only contain tens of thousands of world facts but because they use voice, moving pictures and real music instead of a few still pictures, horrid "music" and one percent of the factual data; hold a kids interest far longer besides

teaching more. To meet Multimedia standards the drive should have an access time of 380 ms or less and a data transfer rate of at least 150 Kb per second. Such drives are available for as little as \$250.

For twice this cost you can get drives that transfer data twice as fast though access speed is little faster. Also more expensive drives can handle the new CD-ROM format pushed by Kodak for photos. While nice, such drives don't add much for users not interested in taking such pictures. With kids a good sound board to go with the CD-ROM is a good investment as only this way can you get access to the good (often near CD quality) sound of Multimedia packages. In fact, if you have young kids the sound board might be a better first investment as there are some good disk based Multimedia educational packages for those 12 and under. Though they often do use up 10 Meg or more of hard disk space.

Sound boards have a distinct compatibility problem for IBM users. There is no standard here. There are some boards of very high quality that won't work with much of the educational software out there. In fact, there is no board that works with everything. But at least 90% of the software is compatible with SoundBlaster boards. While not the highest quality board they probably are the most useful. They range in cost from about \$80 to over \$300 depending on their features. All meet the same compatibility standards. The more expensive ones have MIDI capability. If you have budding musician in the house this may be very useful.

Continued on the last page...

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc., and is free to all club members. Membership status and expiration date are listed on the mailing label. Membership dues are: Regular Members...\$10/yr; Family Memberships...\$12/yr; Address all new memberships, renewals, or questions to THE PRAIRIE ASTRONOMY CLUB, INC., P.O BOX 80553, LINCOLN, NE 68501. For other club information contact one of the following: Dave Knisely (Beatrice)223-3968, Ron Veys (Lincoln)486-1449, Lee Thomas(Lincoln)483-5639, John Lortz (Omaha)496-1122. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 11684 Meredith Ave., OMAHA, NE 68164 no later than 10 days before monthly club meetings. Club meetings are held the last Tuesday of each month at Hyde Observatory in Lincoln, NE.

1993 Mid-States Regional Convention

REGISTRATION FORM

One form per individual or family, please.

Your Name: _____ Phone: () _____

Address: _____

State: _____ Zip: _____ Club Affiliation (if any): _____

Other Family Members Attending: _____

REGISTRATION COST

Amount

Individual..... \$25.00
 Individual (after May 20)..... \$30.00
 Family..... \$35.00
 Family (after May 20)..... \$40.00

Enter one amount: _____

ON-CAMPUS ACCOMMODATIONS (One or two per dorm room. Specify single or double.)
 Nights you plan to stay in the dorm: Thursday Friday Saturday

	<u>No. nights</u>		<u>Charge</u>	<u>No. Persons</u>		
Single	_____ X		\$12.00	X _____	=	_____
Double	_____ X		\$12.00	X _____	=	_____

If you have chosen a roommate, name: _____

Linen..... \$ 3.00 X _____ = _____

(Optional. Consists of 2 sheets, towel & wash cloth.

Does not include pillow, pillowcase or blanket.)

MEALS

	<u>No. Persons</u>	<u>Charge</u>	
"Meal Package" (includes 5 meals listed next)	_____ X	\$25.25 =	_____
If purchased individually:			
Friday breakfast	_____ X	\$4.75 =	_____
Friday lunch*	_____ X	\$5.50 =	_____
Saturday breakfast	_____ X	\$4.75 =	_____
Saturday lunch*	_____ X	\$5.50 =	_____
Sunday breakfast	_____ X	\$4.75 =	_____

Saturday Night Banquet* _____ X \$13.75 = _____

(not part of the "Meal Package." Your guest(s) may attend this without paying any other fees.)

Friday night picnic at UNL's Behlen Observatory is free to registrants.

* Noon lunches and banquet are all-you-can-eat buffets.

Total _____
Amount Enclosed: _____


Send registration form and check (payable to **Mid-States Regional Convention**):

1993 MID-STATES REGIONAL
 P.O. BOX 80553
 LINCOLN, NE 68501

This form may be copied for additional registrations.

Questions? Call Lee Thomas, Registration Chairman, at (402) 483-5639 after 6 p.m.

Note: Confirmation of your registration will be sent about two weeks after receipt of this completed form and your payment. Pick up your convention credentials and information packet at the registration table when you arrive.

 **THE Prairie
Astronomy
Club**

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Nebraska
Wesleyan
University

present

MIDCON
93

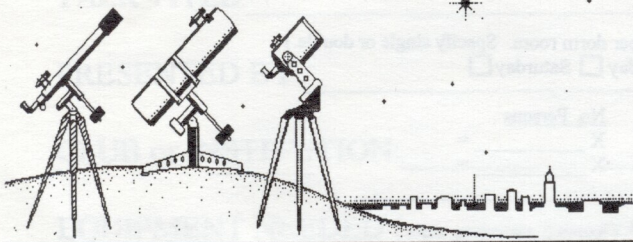
Mid-States Region



Mid-States Regional Convention

June 11-13, 1993
Olin Lecture Halls
Nebraska Wesleyan University
Lincoln, Nebraska

*A celebration of
amateur astronomy*



MIDCON 93
P. O. Box 80553
Lincoln, NE 68501

MID-CON '93 PRELIMINARY AGENDA

All convention: The vendor rooms will be open whenever there are activities in Olin Lecture Halls
The swap room will be open all day Friday and Saturday except during paper sessions. These rooms are located in the Olin Hall of Science.

THURSDAY

4:00 p.m. - 8:00 p.m. Early registration at Olin Lecture Halls, Nebraska Wesleyan University.
8:30 p.m. Planetarium show with Jack Horkheimer at Mueller Planetarium, 14th & U.

FRIDAY

8:00 a.m. - 5:00 p.m. Registration at Olin Lecture Halls.
8:00 a.m. - 8:30 a.m. Breakfast serving line open at the Student Center
9:00 a.m. - 11:00 a.m. Tour of Hyde Memorial Observatory, S. Shore Road & 70th St., Holmes Park.
12:30 p.m. - 1:15 p.m. Lunch serving line open at the Student Center.
1:00 p.m. - 1:15 p.m. Convention welcome and announcements at Olin Lecture Halls.
1:15 p.m. - 4:30 p.m. Paper session and door prizes, Olin Lecture Halls.
6:00 p.m. - 7:30 p.m. Picnic supper at Behlen Observatory, followed by tour of observatory.
Bring your own blankets, folding chairs etc.
Twilight: Observing contest.
Dark: First star party, 30" telescope will be open.

SATURDAY

8:00 a.m. - 11:00 a.m. Registration desk is open at Olin Lecture Halls.
7:30 a.m. - 9:00 a.m. Breakfast line open at the Student Center.
8:00 a.m. - 9:00 a.m. Breakfast meeting in the Student Center for Astronomical League business.
9:30 a.m. - 12:30 p.m. Paper session and door prizes, Olin Lecture Halls auditorium.
12:30 p.m. - 1:15 p.m. Lunch line open.
1:30 p.m. Group photo on front steps of Olin Hall of Science.
2:00 p.m. - 4:00 p.m. Paper session and door prizes, Olin Lecture Halls.
4:15 p.m. - 5:30 p.m. Astro Trivia contest.
6:00 p.m. - 7:00 p.m. Social hour / cash bar, The Knolls Country Club, 2201 Old Cheney Road.
7:00 p.m. - 9:30 p.m. Awards Banquet at The Knolls, Jack Horkheimer banquet speaker.
9:30 p.m. Caravan from The Knolls to the Atlas Observing Site for second star party.

SUNDAY

8:30 a.m. - 9:00 a.m. Breakfast line open at the Student Center.
9:00 a.m. - 11:00 a.m. Paper session if needed otherwise Computers in astronomy seminars.
Contributions to the computer seminars welcome. Please note this on your Call for Papers form.
11:00 a.m. Convention closes.

MID-CON '93 CALL FOR PAPERS

If you would like to give a talk or present a paper during the convention, please fill out the form below and return it to us promptly. We welcome any topic related to amateur or professional astronomy. All we ask is that you try to limit the talk to 20 minutes or less with 5 minutes for questions. If you need more time for your talk, please put how much you will need in the Equipment Needed section, and we will try to fit you in on a time-available basis. Thank you.

TALK TITLE: _____

PRESENTED BY: _____

CLUB or INSTITUTION: _____

EQUIPMENT NEEDED (Slide projectors, trays, TV-VCRs, overhead projectors, etc.):

PRESENTER'S BACKGROUND: _____

Please feel free to duplicate this form.
MID-CON '93. P.O. Box 80553, Lincoln, NE. 68501

Observing Chairman's Report

by Dave Knisely

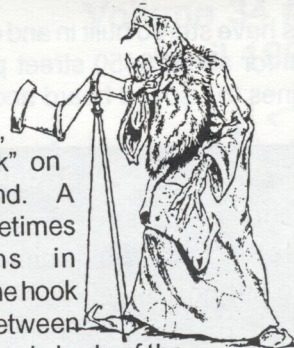
THE NEXT SCHEDULED STAR PARTIES WILL BE HELD MAY 14th AND 21st AT THE ATLAS SITE. The spring skies are dominated by galaxies, and a good one to start out with is M63, located 1.25 degrees north of 19 Canum Benaticorum. Although visible in a 2.4" refractor, this galaxy requires at least an eight inch to show much in the way of detail, mainly in the form of a bright central core and an irregular elliptical outer haze. A ten inch under good conditions will show a star like nucleus, an inner rectangular mottled area, and a hazy oval outer halo.

Also in Canes Venatici is the bright spiral M94, located three degrees north and one west of Alpha. It appears as a small round fuzzy patch with a brighter middle when viewed in small telescopes, and this appearance doesn't change appreciably in larger instruments. On an excellent night, a ten inch at moderate power may show some very faint ring-like structures in the outer haze.

A bit fainter target for the serious amateur is NGC 4244, located 1.25 degrees south and 1.25 degrees west of 6 Canum. It is a faint needle of light in small apertures, with larger ones showing some vague patchyness on the ends. A large but infrequently observed object is the edge-on galaxy NGC 4631. It can be found 5.75 degrees south and 2.5 degrees west of alpha, and can be glimpsed in three inch as a very faint cigar-shaped fuzzy patch. An eight inch will show some hints of mottling over some of the outer portions of the galaxy, along with the tiny faint elliptical galaxy, NGC 4627, hugging the north-west side. A ten will often show a large star cloud and additional dark detail in this fascinating object.

Almost as interesting is nearby NGC 4656, located less than a degree to the east-southeast of NGC 4631. It is somewhat fainter than NGC 4631, being just visible in a four inch as a short fuzzy bar of light. An eight inch will show

as long and thin, with a faint "hook" on the north-east end. A ten inch will sometimes show variations in brightness along the hook and a dark spot between the hook and the main body of the galaxy.



In Ursa Major, take a look at a pair of Messier objects, M108, and M97. M108 can be seen in a three inch as a very faint moderate sized elongated patch. A six inch reflector will show the galaxy well, along with a faint star near the center. Some dark detail can be seen in eight inch and larger apertures, but the star's presence makes observing these details difficult.

Less than a degree southeast of M108 is the famous "Owl" nebula, M97. Small instruments will show it only as a very faint circular puff. A six or eight inch will sometimes show one of the dark spots which make up the owl's eyes, and the use of a narrow-band nebular filter will improve the view by quite a margin.

Also in Ursa Major is the bright barred spiral M109, located about a half degree south and a half east of Gamma. Small apertures will show it as a faint diffuse oval patch with a brighter middle. A ten inch will show a short faint central bar running north-east to south-west through the nucleus with a faint patch of light on its south-west end.



Others have stereo built in and other features. If you are running short of "slots" in your computer they do sell for about \$450 street price, a combination CD-ROM and stereo sound board package that combines the sound board and CD-ROM drive controller onto one board.

For about \$100 more you can add MIDI capability. For those who can afford it, it would be worth considering. Or you can get just the sound board and controller card now (about \$200) and add the drive (about \$350) at a later time. Or you can get a drive now and add a cheaper sound board later if you aren't interested in Multimedia packages at this time. This will take up two slots though. My first computer could put 100K on a floppy disk. I couldn't imagine filling one. Now one CD-ROM costing about the same in today's dollars, holds 6600 times more. The possibilities are astronomical. (Sorry, I had to say it!)ng about the same in today's dollars, holds 6600 times more.

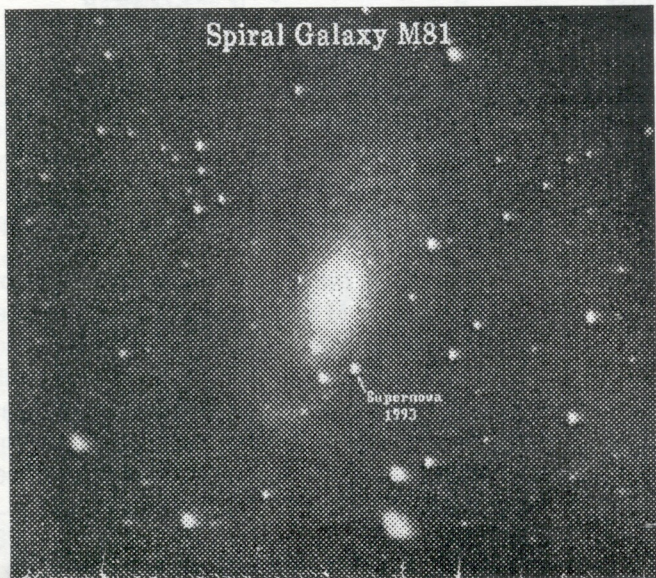


Photo submitted by Dave Knisely

PLEASE NOTICE

If there is an asterisk on your mailing label it is time for you to renew your PAC membership!

LINCOLN NE 68501 DECE 22-21 04/28/93

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Next Meeting April 27, 1993