

Fall Public Viewing at Behlen

by Martin Gaskell

Behlen Observatory's fall public night will be on **Friday October 7th** from 8pm to 11pm. Club members are welcome to set up telescopes outside on the grass (power is available, but bring a very long extension cord!). 'Scopes can be setup from 7:30pm onward. The astronomy department at UNL greatly appreciated everyone who brought a telescope for the summer Sl-9/Jupiter viewing.

There will be talks by UNL astronomers, slide shows and demonstrations of the 30" telescope even if it is cloudy.

The observatory is on the UNL agricultural station near Mead, NE. It is 0.7 miles north of "8th" and "H" (about 1.7 miles north of the TV tower). For more information you can call 402-472-3686.



In Memory of Philo Prell...

The Unitarian Church would like to acknowledge that they have received the contribution that the Prairie Astronomy Club made in memory of Philo Prell.

The money is to be placed in the Unitarian Foundation's Playground Fund. Philo enjoyed keeping up the playground equipment for the children.

Newsletter Submissions

Yes, YOU can have your articles, letters, graphics, etc. published!!! Just send your works to:

John Lortz
11684 Meredith Ave.
Omaha, NE 68164

Submissions can be made via paper or electronically on 3 1/2" or 5 1/4" disk. You can also contact me on CompuServe via E-mail at this address: 70571.1714@CompuServe.com

Accepted Formats:

- Microsoft Word
- WordPerfect
- Ami Pro
- Microsoft Works
- Microst Publisher
- ASCII Text
- .DBF
- .GIF

- .TIF
- .PCX
- .RTF
- .BMP
- .CGM
- .WMF
- and probably just about anything else you can store on a disk.

The Prairie Astronomer

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While You Were Gone...

by Jason Stahl

Elections are next month! Here are the positions up for grabs along with the duties of each

DUTIES OF THE ELECTED OFFICERS

President:

The President shall organize and direct the regular monthly meetings and all other Club activities, officially represent the Club at meetings of regional and national importance where he/she is in attendance or to delegate this authority. The President shall have the authority to call meetings of the Board of Directors and to appoint non-elected officers.

Vice-President:

The Vice-President shall be responsible for meetings when the President is absent. He/She is to be the mediator in cases of procedural dispute, and is to temporarily assume any duties of any officer at the direction of the President. He/She shall also maintain control of the current inventory of all Club property.

Secretary:

The Secretary shall handle all Club correspondence, be responsible for the distribution of information received through official Club correspondence, and shall be in charge of Club publicity.

Treasurer:

The Treasurer is responsible for all Club funds and for keeping accurate records of all monetary transactions. He/She shall submit a written report of the Club's monetary status at the request of the President, or give a verbal report at the request of any member during regular meetings.

2nd Vice-President:

The 2nd Vice-President shall be responsible for the formation and presentation of monthly Club programs.

Listed below are the duties of the Non-Elected Officers, for those of you who want to do any of these positions once the elections are done in October you should let the President know.

DUTIES OF NON-ELECTED OFFICERS

Publications Chairperson:

The Publications Chairperson is responsible for the editing, publishing, and mailing of the Prairie Astronomer in advance of each monthly meeting.

Site Chairperson:

The Site Chairperson is responsible for establishing a site committee to oversee the maintenance and security of the club site.

Recording Secretary:

The Recording Secretary is responsible for keeping the minutes of Club meetings and filing a copy with the Club Secretary.

Librarian:

The Librarian shall keep the Club library and promote its circulation among the Club members. Dated records of persons to whom books are circulated are to be kept by the Librarian. He/She shall keep a current bibliographic listing of all Club library materials and file updated copies as necessary with the Club Treasurer.

Observing Chairperson:

The Observing Chairman shall present a monthly report at Club meetings and/or in the Prairie Astronomer. He/She shall attempt to keep members informed of upcoming celestial events, sky objects of special interest, and star parties.

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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 Members...\$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: John Bruce (Lincoln) 483-0389, 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,

(Continued from page 2)

Two articles about The First Nebraska Star Party have been published. Dave Scherping's article is in "Clear Skies." Dave's article is well done and deserves to be read. Ask Dave for a copy of "Clear Skies" at the meeting. Or get your own by writing to: Clear Skies Nancy L. Hendrickson; Editor, 10464 Clairemont Mesa Blvd. #222, San Diego, CA 92124. If you would like to subscribe to Clear Skies, it is \$19.00 per year, and it is published quarterly. Clear Skies is a very well done News letter that every one will enjoy. If you don't believe me, take a look at a copy of it at the meeting.

The Second article, written by Jason Stahl, will be in Issue number Four, in "Amateur Astronomy." This magazine is a take off of Telescope Making but only better. It is produced by Tom Clark of Tectron. If you would like your own copy, or if you would like to subscribe, write to: Tom Clark, 2111 Whitfield Park Ave., Sarasota, FL 34243. It is \$18.00 per year, and is published quarterly. With over forty pages of great astronomy ideas and articles, Amateur Astronomy is worth the money.

The work on NSP 1995 is under way with the 1995 committee being established at the September meeting. This committee will begin work in October of 1994. If you would like to help, contact Tom Miller at 466-4145 in the evenings and let Tom know how you can help!

The last Mahoney Star Party was the largest ever!! With only three people to handle over two hundred astronomy hungry people, this was the poorest turnout by the Prairie Astronomy Club. The Omaha Astronomical Society was having their own public night in Omaha at the same time as Mahoney. For that reason, we understand why they were unable to attend. But their is no excuse for us. If the club does not want to do any more Mahoney Star Parties for next year, please speak up this time. When Mahoney was created back in April, the club showed small signs of supporting this. The club had virtually no interest in this but the few people who should be recognized. They are Mike Sibbersen, Erik Hubl, Kendra Stahl, Tom Miller, Dave Scherping, John Bruce, Lou Dorland, John Johnson, and Jason Stahl. Their was several times where Omaha really saved our butts. If some members from the Omaha Astronomical Society did not come down, this whole event would have been bad publicity for our club!!! The few volunteers from Omaha, we owe you very much. If anything, The few of us in PAC hope this has helped you re-establish membership for your club. If you would like to continue to do this for next year, you probably won't have the Prairie Astronomy Club helping you, for that we are sorry. I will be happy to help you with this venture next year by talking to the people at Mahoney again if you would like to do this. If the Prairie Astronomy Club would like to really get involved, now is the time to speak up!!

On September third, Bryan Schaaf, John Bruce, and Jason Stahl, spent all morning getting rid of our thistles. We had about two pick-up truck loads that were removed. By doing this, these three saved the club a large fine if we would have left it alone. Our thanks to those three for doing that "sticky" job.

Reminders for October

- ⊙ The next PAC observing is October 1, then on Oct. 7, and on Oct 8.
- ⊙ New Moon is on the fourth at 22h56m
- ⊙ First Quarter is on the 11th at 14h19m
- ⊙ Full Moon is on the 19th at 7h20m
- ⊙ Prairie Astronomy Club Meeting and Elections is on the 25th at Hyde Observatory starting at 7:30 p.m.
- ⊙ Last Quarter is the 27th at 11h46m
- ⊙ The Draconid meteor shower peaks on the 8th.
- ⊙ The Orionids peak on the 22nd.
- ⊙ Jupiter is Occulted by the Moon on the 7th.
- ⊙ On the 17th through the 18th Mars cuts through the Beehive.
- ⊙ On the 6th in the early evening, Venus, Jupiter, Mercury, and the Moon will be all fairly close to one another.

This month's observing chairman's report is left up to you. Over the last year, I have brought you the reader, and astronomer, suggested objects to look at. This month I want you to find your own exciting objects and observe them. I would also like you to please write down some of your favorite fall objects and send them to me. I will use your objects in my last Observing Chairman's Report. Since this hobby is about what you like, I want your objects to be the ones in the Observing Chairman's report. The deadline for your objects is October 7th. You can send as many as you want, there is no limit. **You can give them to me at the September meeting or mail them to me at: Jason Stahl, 6111 South 31st, Lincoln, NE 68516.**

See Ya at the September Meeting, and happy observing.

Comet to hit Earth???

Here are some "interesting" messages that Jack Dunn found on the Internet and passed along for the newsletter.

Newsgroups: sci.astro Subject: Re: Comet to hit Earth?
Date: 11 Sep 1994 14:56:19 -0700

Here's an article that ran in the Sept. 11 '94 San Jose Mercury News:

DESTINATION EARTH? Newly found comet fragments bear watching, observers say.

(Reuters) LONDON—Astronomers are carefully observing fragments from a recently discovered comet that some believe could potentially threaten Earth, Britain's Sunday Telegraph reported. The new comet, known as Machholz-2, was discovered last month by an American astronomer as it raced toward the Sun, but as other observers turned their telescopes toward the object they found the comet had broken up, just like comet Shoemaker-Levy 9, which hit Jupiter in July.

By Saturday, five fragments had been seen—all in a path that would bring them within the orbit of Earth. Information from observatories so far suggests that if the fragments continue on their current trajectory they should avoid an impact with Earth, but astronomers said it was extremely hard to predict their long-term behavior. Duncan Steel of the Anglo-Australian Observatory told the Telegraph that the influence of Jupiter would dominate their orbital behavior. "It's most likely that Jupiter will pick up the objects and throw them out of the solar system again. As far as we can tell, they should not hit the Earth in the next 100 years. But we might be wrong. It could happen in the next few decades. What we need are more observations so that we can get a more accurate orbit."

Newsgroups: sci.astro Subject: Comet to hit Earth? Date: 11 Sep 1994 21:16:55 GMT

Last night on the NBC radio news at the top of the hour (8pm CDT) there was a short report about a comet that *might* be on a collision course with the Earth. The report said that it was still uncertain if the comet would hit and when. As Brian Marsden is fond of pointing out, the error ellipsoid for the orbit of EVERY newly discovered comet initially includes the earth.

Newsgroups: sci.astro Subject: Machholz 2

I just read in the newspaper that there could be some concern of an earth impact from Machholz 2. I expect that this is media exaggeration of a small probability. The press release originated from London over the Reuters service.

Rubbish. It's in the "star" over there — one of the trashies. Last month the story was it was a piece of SL9 that had missed Jupiter. These are the same people who, upon hearing that there was increased decametric radio signals during the impact week, printed a headline that Jupiter's citizens were radioing for help.

Subject: re: Machholz 2 Date: 13 Sep 1994 22:43:27 GMT
Organization: University of Arizona, CCIT

There is no immediate concern of an Earth impact for this comet. I have integrated its rather preliminary orbit both forward and backward. It passed 0.32 AU from Earth a few nights before its discovery and may have approached 0.26 AU from Earth in October 1983 (though this should be treated with little confidence since the orbit is very preliminary). In the future, it may approach to within 0.3 AU of Earth in 2022. Between now and then, there are no approaches to Earth of less than 1 AU. My original motivation for the backward integration was to see if there might have been a close approach to Jupiter (ala P/Shoemaker-Levy 9, RIP) that might have caused the breakup, but the only one is a rather distant 0.5 AU in 1970 (again, far beyond where I would trust the current preliminary orbit). I suspect that we will find that this comet broke up near its last perihelion passage and that the secondary nuclei will not last particularly long. Historically, 2 comets come to mind which behaved in this manner, P/Biela which was observed during 4 perihelia before being found to split during its 5th observed perihelion passage in 1846. Both pieces were recovered during its 1852 perihelion, but attempts to recover it at later perihelion passages proved unsuccessful (even though the 1865-1866 passage should have been favorably placed). It presumably disintegrated completely, an idea supported by the observation of meteor showers in 1872 (rates of 3000 meteors per hour), 1885 (15000 per hour), 1892 (6000 per hour), and 1899 (150 per hour). (ref "Comets A Descriptive Catalog" by Gary W. Kronk, 1984.) The second comet was P/du Toit-Hartley, originally found by D. du Toit in 1945 and lost until it was rediscovered by Malcolm Hartley at the UK Schmidt at Siding Spring in February 1982. Hartley reported 2 comets, found on the same plate which co-worker Ken Russell noted had "remarkable similarity of the motions of the two objects and suggests that they may be genetically related." (ref, IAUC 3663). Sekanina reported that the splitting may have occurred in late 1976 (ref, IAUC 3665). S. Nakano identified the new comets as the lost P/du Toit 2 and the comet was then given its present name (ref, IAUC 3668). I recovered P/du Toit-Hartley in December 1986, but was only able to identify one nucleus (I hunted for a 2nd with my search assuming that I had recovered the primary from 1982). The apparition was not particularly favorable, however and the comet was in the Milky Way. It recently perihelion in August, 1992, but escaped detection during a relatively unfavorable apparition (I hunted unsuccessfully for it, for example).

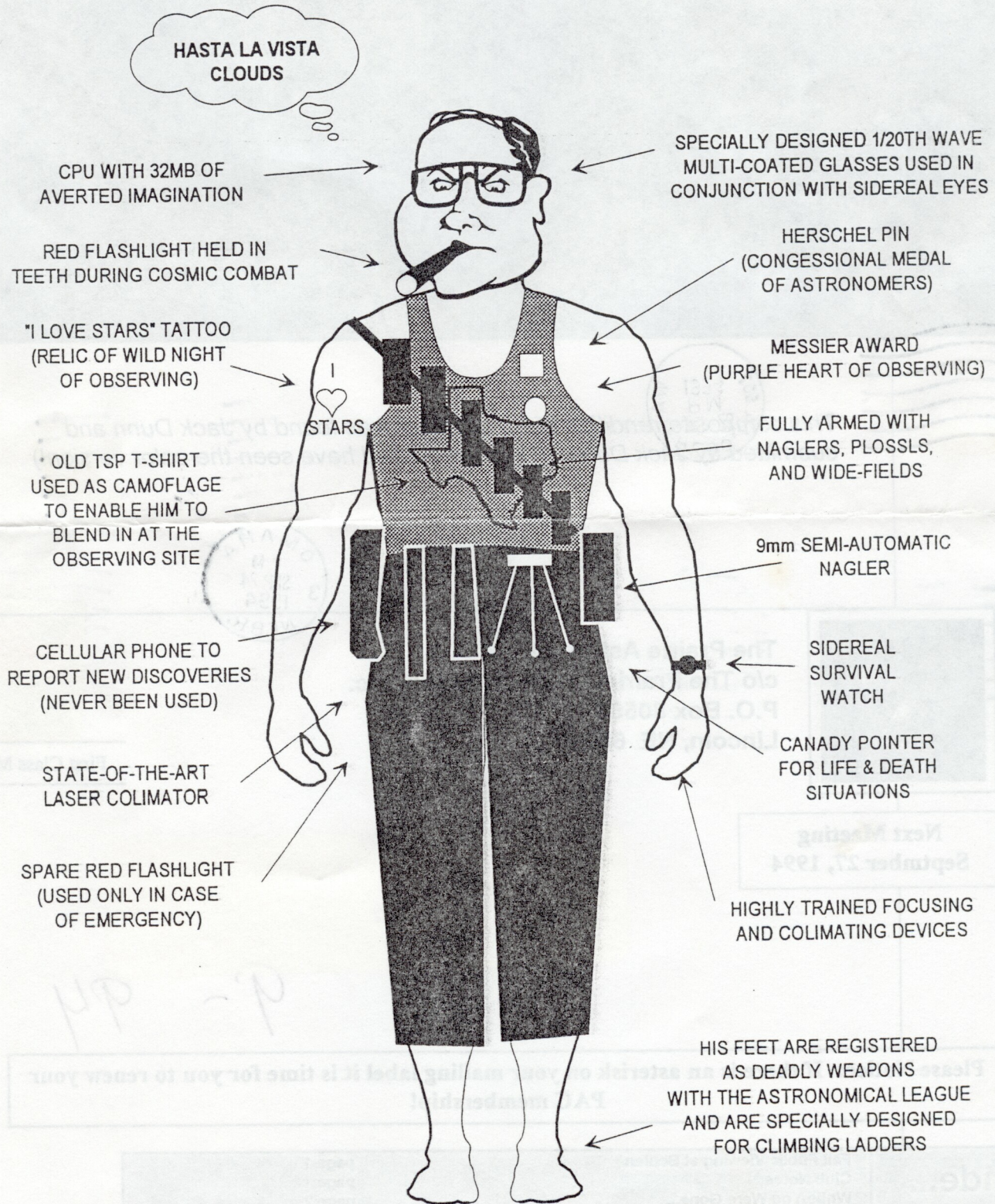
We have been observing P/Machholz 2 with the 36 inch Spacewatch Telescope on Kitt Peak during the past week. Besides seeing the 4 companions, we've seen the primary nucleus varying markedly from night to night in its activity level. There may be night to night variations visible in the total magnitude estimates of visual observers. As an example, on September 6, there was a very well defined hood-like coma structure several arcminutes in diameter. The following night, there was a small plateau of activity surrounding the nucleus with fine structures visible in the plateau. On September 8, the plateau is gone and the hood-like structure is disappearing. Later, the hood-like structure is completely gone. A very interesting comet, indeed!

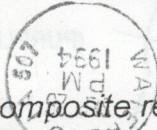
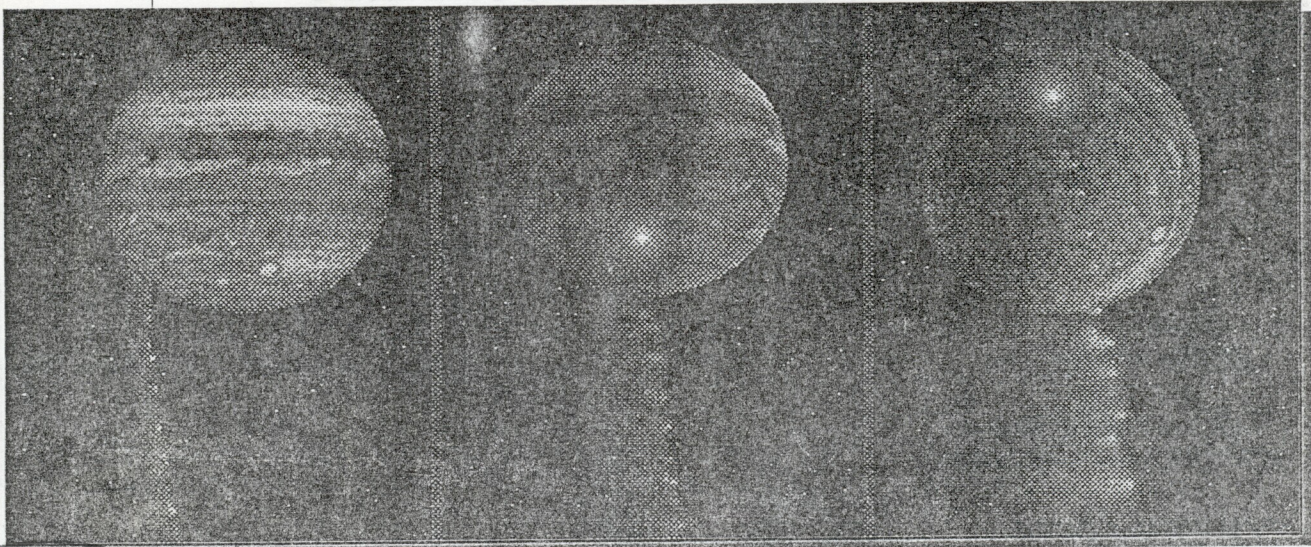
— Jim Scotti {jscotti@lpl.arizona.edu} Lunar & Planetary Laboratory, University of Arizona, Tucson, AZ 85721 USA

ASTRO-MAN

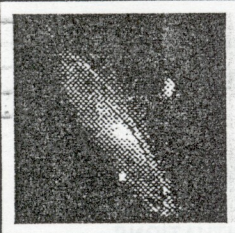
BY DAVE SCHERPING

ASTROMAN, AKA "THE COSMIC COMMANDO"
PREPARES TO FOR HIS GREATEST MISSION OF ALL TIMES:
"THE NGC MARATHON"





This composite rendition of SL-9/Jupiter was found by Jack Dunn and submitted by Jack Dunn. (I wish you could have seen the color version!)



The Prairie Astronomer
c/o The Prairie Astronomy Club, Inc.
P.O. Box 80553
Lincoln, NE 68501



First Class Mail

Next Meeting
September 27, 1994

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

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