



SOME MORE WORDS ON "ATLAS"

BY LEE THOMAS

At the last meeting, the club voted to authorize purchase of the decommissioned Atlas Missile site from the Firth Co-op for \$250 per acre, or \$1,062.50 for the total 4.25 acres that we wanted. Meanwhile, the Firth Co-op board of directors was deciding that, in fact, they wanted \$1,500 for the land, or about \$352.94 per acre.

They came back to us with that figure as a firm offer to sell. In addition, they said that, if we didn't want to spend the whole amount immediately, they would accept \$500 down and a 210 note across two years for the balance. (That would be a \$600 principal + interest payment in 1988, assuming we bought the land early in 1987, and a \$550 principal + interest payment in 1989.) And, they asked that we build in an option for the Firth Co-op to repurchase the property should we ever decide to sell it.

I said that I doubted very much whether the club would go for the deal, but I would take it back to the committee. The combined Board of Directors and Observatory Site Committee met on Tuesday evening, December 9th. We went over the other available sites that met our criteria for distance and usability and concluded that we probably would never locate one as favorable as Atlas.

We examined our financial situation at the same time, decided it was iffy, but possible to purchase the land depending upon how the club as a whole felt about the apparently tight operating finances that acquisition of the property would impose upon us for the next few years.

It was decided that we would bring the proposal to the full club for a vote at the December 30th meeting.

Since December 9th, we have received a substantial amount of money in donations/pledges—\$1,490 to be exact! Added to our previous Savings Account balance, we now have over \$3,000 in the kitty. This does NOT include our regular checking account balance which is now slightly over \$1,000. The donations came from six people, and one was for \$1,000 (from an anonymous donor.)

Certainly, this means that, if we want to, we can purchase the land for \$1,500, and do the necessary "improvements" to satisfy our insurance policy, which would run \$500, and still have a comfortable margin for operating the first couple of years.

I presume that there are still some potential donors from whom we have not yet heard, whose generosity before January 1st would give our treasury more operating room and beat the tax man to the punch.

The Committee has also discussed a keyholder plan for regular site users that would generate some additional revenue.

It is too far into the winter to purchase Atlas Site now and close the access shaft, and I have discussed this problem with the Co-op manager. So long as we can close on the land by the Co-op's Annual Meeting on March 27th, they are willing to accept a handshake deal that we will buy it.

It is a big step, certainly. We need to discuss it, and vote. We still must watch our pennies and not get carried away, but, because of some very generous folks, it appears that we can get our preferred permanent observing site without going into hock... if we want it.

THE REVIEWER

by David Knisely

The Cambridge Deep-Sky

Atlas by Jack Newton and Phillip Teece
Cambridge Univ. Press Retail \$19.95

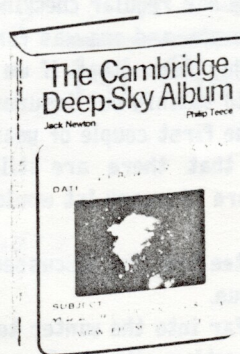
When you look at most pictures of deep-sky objects in textbooks, you haven't the slightest idea of the size of the object, the field orientation, or the faintest star shown in the picture. What has been needed for a long time is a book that shows objects as they really appear in the sky through large telescopes. This is what I had hoped THE CAMBRIDGE DEEP-SKY ALBUM was going to be before I bought it. Sadly, this book, although structured properly, has some of the worst pictures I have ever seen. This does not seem to be the fault of the photographer, Jack Newton, but is apparently the result of poor reproduction by the publisher, turning what otherwise might be a fine book into a real tragedy.

The book consists of 127 color photographs of the best Messier and NGC objects, along with information and descriptions for each one. After a quick introduction, the authors detail how the pictures were taken with Newton's 40cm (15.7 inch) Newtonian using a cold camera and Ektachrome 400 film exposed for about 14 minutes. The pictures of Newton's instrument and dome show a rather odd color balance that hints at the horrors to come.

The photographs cover a width of about one degree of sky, which is fine for most of the objects but is far too small a scale for things like planetary nebulae and small galaxies. The direction of true north is provided, along with the object's position, type, and magnitude. The major problems with the pictures are the color (or lack of it) and the large number of horrible defects that in some cases all but wipe out the image of the object. Wide bands of faint reddish color are present on a large number of the pictures, and the colors present in the objects

themselves are usually faint pastels that look like a poor attempt at manual colorization. Some objects are almost invisible in the pictures due to faintness or insufficient scale as in the case of four planetary nebulae and a number of galaxies. The printing of the picture of the Double cluster just about wiped out about a third of the stars in the field! Some pictures show light blue or red backgrounds and unusual color shifts in the images that do not seem to be film related. I rated all 127 pictures as to their quality in categories ranging from excellent to unusable. No pictures were rated excellent, although there were a few near misses. 17% were good, 39% rated fair, 42% I considered poor, and two percent I rated as nearly useless. If I were the authors, I would be looking for a new publisher!

To their credit, the authors did do a fair job in presenting the material, with the exception that some objects were presented on too small a scale to be easily seen. There is a small side benefit from the poor quality pictures: some objects do bear some resemblance to their visual appearance in an eight inch telescope (especially the two pictures of M-31). Perhaps some of the pictures were too difficult to reproduce in color, but they could at least have tried black and white. I can't recommend this book except perhaps as an example of what happens when things go wrong. I just hope Newton and Teece can revamp the book and try again with another publisher or printer!



The Prairie Astronomer is published monthly by The Prairie Astronomy Club Inc., and is free to all club members. Membership expiration date is listed on the mailing label. Membership dues are: Junior Members and Newsletter Only Subscribers... \$8.00/yr, Regular Members... \$22.00/yr, Family Membership... \$25.00/yr. Address all Membership 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 officers: Lee Thomas (Pres) 483-5639, David Knisely (V. Pres) 223-3968, John Lortz (Sec.) 390-9821 (Omaha), Norma Coufal (Treas) 483-5685, Dan Neville (2nd V.P.) 476-7772. All articles and comments should be sent to newsletter editor JOHN LORTZ 9255 CADY AVE. #14, OMAHA, NE. 68134 no later than 6 days before monthly club meetings.

PRESIDENT'S MESSAGE...

For openers, I want to thank everyone for their confidence in electing me to the club's highest office. I must admit, I had some mixed emotions about accepting the job. After doing the Treasurer routine for so many years, it will seem strange not to be collecting money and fiercely hoarding it against the onslaught of some free-spending President. Egad! I have met the enemy, and he is me!

Not to mention the fact that, leaving the Treasurer's post, I finally had to clean up the bank account and balance the books.

At the time of election, I had left my last job (as anybody who reads the newspaper knows), and had to say that maybe I wouldn't be around to finish out my term of office. This hopeful ploy to deflect my election failed miserably. As I recall, Earl piped up and said something like, "That's what Vice Presidents are for", and the proceedings turned immediately to a hard-fought contest for that office.

Well, it turns out that I will be staying in Lincoln. My business partner and I have purchased a radio stations here, so I'll be around for the full term of office. I suspect this might be an exciting period in the Prairie Astronomy Club's long history, and I can hardly wait.

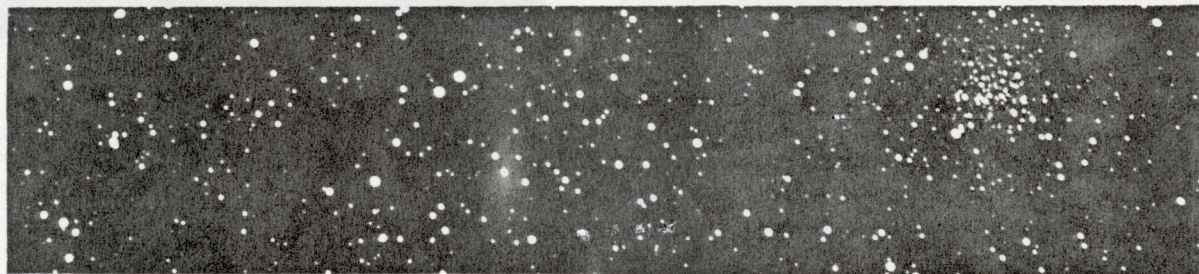
If we go through with the purchase of Atlas Site (see separate story), we'll have alot of work and many pleasurable hours of viewing under truly dark country skies to look forward to. that is one goal I want to work toward: making the club a valuable service to its members' astronomy interests, even (and perhaps especially) those of the relatively casual observer.

I hope we can field a big delegation for the MidStates Regional convention this year. It is in Kansas City, just a short drive away. Anybody who follows the Kansas City club's newsletter knows about their observatory and big league telescope. I'm tired of reading about it -- it's time we went down and saw for ourselves, especially if we embark on our own similar project.

My third goal is to make the club an inviting place for fledgling astronomers. Our association with Hyde Observatory brings in alot of prospective members, and sometimes because we get caught up in club business, or programs and personal discussions about some of our narrow specialties, those folks get lost in the shuffle. Some of them never return, and that's a shame because I think we have much to offer. John Lortz's New Member Packet project is a great step in the direction of welcoming new members. We need them, and we need to take the time to get to know them and their interests in astronomy almost from the moment they first walk in the door.

Finally, for everybody, I want to thank Andy Corkill for his hard work as our outgoing President. He is handing over the reins of a club that is in very good shape, growing in every way. Any incoming President has got to appreciate that; I just wish he was going to stick around so I could lean on him for help and advice. I hope you don't get lost in those mountains, Andy, and that you'll come back home to the club real soon.

Lee Thomas



Club Library News...

Here is a listing of the books now available for check out from the PAC library (courtesy of club librarian Norma Coufal)...

CAMBRIDGE ATLAS OF ASTRONOMY
GUIDE TO THE STARS by Peltier
STARWATCH by Mayer
TIME FOR THE STARS by Heinlein (1956)
BEYOND THE MOON by Maffei
MONSTERS IN THE SKY by Maffei
DESIGN OF THE UNIVERSE by Hahn (1954)
OBSERVATIONAL ASTRONOMY FOR AMATEURS by Sidgwick
AMATEUR TELESCOPE MAKING BOOK #1 from Sci. Amer.
STARS & PLANETS by Kauffman
BLACK HOLES
PRESIDENTIAL COMMISSION REPORT ON SHUTTLE
ASTROPHOTOGRAPHY by Covington
COMET by Sagan
PICTORIAL GUIDE TO THE MOON by Alter
EXPLORATION OF SPACE By Clark (1951)
GUIDE TO THE PLANETS by Moore (1954)
ASTRONOMY, MAPS, AND WEATHER by Wylie (1942)
TO THE ENDS OF THE UNIVERSE by Asimov (1967)
MARS AND THE MIND OF MAN (1973)
NEWCOMB'S ASTRONOMY FOR EVERYONE (1942)

As you can see, many of the books in the library are quite old. Norma hopes this will change in the future through book donations and club purchases. Right now she has two Astronomy Club bonus coupons to use and would like some suggestions on what to purchase.

Just as a note, for those new members who would like to start an Astronomy library at home, two good sources for books are available. One is the Astronomical League which offers 210 off many popular astronomy books to all PAC members. Book listings can be found in the Reflector (the Leagues newsletter) which finds its way to members every now and then. A second good source of books is the Astronomy Book Club. When first joining the ABC you get to choose a selected number of books practically for free as long as you purchase a set number of books from the club in the future. Regular prices for books offered by the Astronomy Book Club are almost always less expensive than the book store. The only drawback is that you must send in a dated reply card every month.

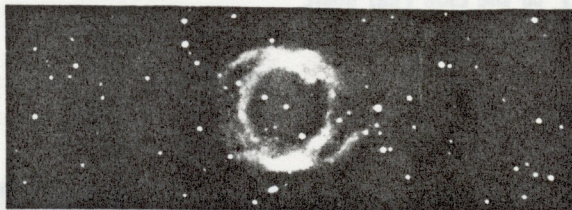
One thing you might consider if you plan on joining the Astronomy Book Club, current members of the club get a free book if they get some new member to join. I assume there are many PAC members who belong to the Astronomy Book Club now, so you could join through these people. Who knows, maybe they will give you the free book, or better yet, donate it to the club library!

IN THE NEXT NEWSLETTER....

Rick Johnson will explain the film hypersensitization (a process where a film's reciprocity failure is decreased and its speed increased to allow for shorter exposure times when photographing the heavens without sacrificing fine grain).

A new column called "Back in the Good Old Days" will debut, dealing with activities and meetings of the PAC of old.

And as always, The Reviewer will drop some hints on what (or what not) to get at the bookstore, and the Observing Chairman's Report will fill us in on whats up in the February sky.



THE NEXT STAR PARTIES WILL BE ON JANUARY 2nd AND THE 23rd. The cold clear skies of January offer some interesting sights. Start with the Rosette Nebula NGC 2244, located about two degrees east and a half north of Epsilon Monocerotis. The nebula and its associated open cluster are visible in a pair of 7 x 35 binoculars under good conditions, but this object is best seen using the Lumicon UHC filter and at least a six inch telescope. Using the UHC filter with the unaided eye will show the nebula as a fuzzy puff, while a ten inch and the filter will show a great deal of dark detail in the nebulosity.

Also in Monoceros is the bright open cluster NGC 2264 with surrounds the giant variable star S Monocerotis. It is large and irregular with some faint nebulosity intermingled with the stars. My eight inch shows a puff of gas near S but showed no sign of the so-called "Cone Nebula" which lies just to the south. Another nice open cluster is NGC 2301, located about two degrees south and one east of 18 Monocerotis. It is a pretty "Y" shaped group of about 20 or 30 fairly bright stars that should be easy in a four inch instrument.

In Canis Major about four degrees south and a bit east of Sirius is the large open cluster M-41. It is notable for the interesting colors seen in the many bright stars of the group when an eight inch or larger telescope is used. Also in Canis Major is the tight group NGC 2362 surrounding the bright star Tau Canis Majoris. It looks like a swarm of fireflies clustering about a yard light and should be easy to see in a six inch.

A spectacular pair of open clusters can be found in Puppis. M-47 is about five degrees south and one degree west of Alpha Monocerotis and has many bright stars making it an ideal target for small telescopes. M-46 is located about 1.5 degrees east of M-47 and is considerably richer, although its stars are fainter. Those of you with six inch instruments may notice a small puff on the north side of M-46. This is the planetary nebula NGC 2438 and an eight inch makes it look a lot like the Ring Nebula in Lyra. Again, the Lumicon UHC filter helps a great deal with this object making it stand out strongly from the stars in M-46.

As a final object, look about 3.5 degrees due south of M-46 for the small planetary nebula NGC 2440. An eight inch will show a small blue-green disk with a faint elliptical outer shell and a very faint central star.

OBSERVING CHAIRMAN'S REPORT

by David
Knisely



At The Last Meeting....

The November meeting started promptly at 7:31pm with 25 members and 2 visitors present. Norma reported on some new additions to the club library [See a listing of the library elsewhere in this newsletter, ED.]. Next, Lee Thomas reported the latest info on the club observing site. The membership voted to raise the top bid to \$225/acre in hopes that the Coop will be satisfied with such an offer. It was also mentioned that in the past the owners of the land had used a special security system to keep unwanted visitors out of the silo shaft... it seems a load of pig manure was dumped into the shaft. And so far the security system has worked quite well!

Three motions were voted upon. The first motion to drop the "Of Lincoln" from the club name passed 18 votes to 2 votes. The second motion to change the word "Club" to some other phrase was defeated by a vote of 14 to 7. So now the official name of the club is "The Prairie Astronomy Club,

Inc.". The last motion to be voted upon concerned the officer title of "Program Chairman". It seems the Astronomical League does not recognize this as an official club office. The membership present voted unanimously to change the title "Program Chairman" to "Second Vice-President".

Club elections were held and some very close races took place. The new club officers for 1987 are...

President:	Lee Thomas
Vice-Pres:	Dave Knisely
2nd Vice-Pres:	Dan Neville
Treasurer:	Norma Coufal
Secretary:	John Lortz

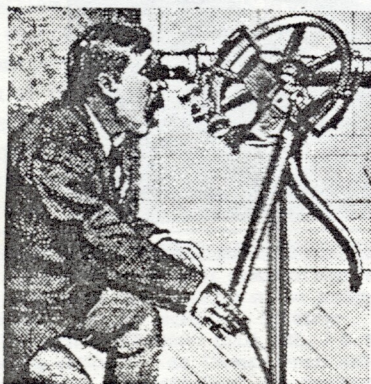
After some hair-raising finishes, Rick Johnson presented the evenings program concerning some great photo's taken of the aurora he encountered in Minnesota, Halley's Comet at 13th magnitude, and a discussion of polarized light.

THE PRAIRIE ASTRONOMER

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Next Meeting December 30th
Atlas voting will take place!!!