

THE FOCAL POINT

Vol. IV, No. II

The Newsletter of the Atlanta Astronomy Club

October 1991

PROGRAM NOTES

by Bud Rosser

The October 1991 meeting of the Atlanta Astronomy Club will be held at 8:00 p.m. at the Bradley Observatory on the Agnes Scott campus on Friday, October 18th. The program will consist of two parts. The first is a Messier Object update and review, conducted by Bill Snell and Richard Jakiel. The second part of the program will be conducted by Rich Jakiel, who will present a slide-supported exploration of H₂-type reflection nebulae.

As most of you know, the ionized hydrogen (H₂) nebulae make up one of the most strikingly beautiful categories of heavenly sights. M-41/42 in Orion is an H₂ type and it should be quite interesting to discover the differences in what each of us observe in this, and other similar nebulae that Rich will show us. Frankly, I've always wondered where the "dark" lanes were and whether they were in front of or behind the major reflective areas. Perhaps we will all know soon...

By the way, thanks for the strong support on Messier Club certification. By now, most of you should have logged at least ten objects. Of the ones most easily seen between 2100-0100 hours, I would be interested in which ones *you* felt could look like a comet! Furthermore, did you have any trouble with M-71? I could *see* it well enough with my 8 inch SN from my front yard in Stone Mountain, but without a little "averted imagination" (thanks, Sharone), I had trouble not calling it

a diffuse nebula, rather than the quite impressive globular cluster that it is. Try looking at it with the club's 20 inch telescope at the Barber Observatory... it's real globular there, and you can resolve it!

Three quick trivia questions:

- 1) Which constellation would you be in (as seen from Earth) to be chatting with Dr. Morbius and Robby the Robot?
- 2) If you were a gorgeous globular cluster (and M-object) located "off Enif", what would you be?
- 3) What kind of weapon is *Sagitta*, where is it coming from, what is its target, and why?

And finally...can anyone tell me the name of that haunting, whistled theme that Jack Horkheimer waddles a planetary ring to? I'd love to hear the whole thing! [*I know what it is, just give me a call, Bud! — Ed.*]

OCTOBER!

by Dave Riddle

October is a month of transition between the steaming hazes of late summer and the chilling rains of late autumn. The days shorten and shadows lengthen as the sun drifts southward. Rhythms of nature slow and tree foliage brightens in acknowledgment of an eternal cycle, the waning duration of sunlight.

High overhead at dusk we find the constellation of Cygnus and here we will examine a small patch of sky to find one of the most celebrated nebula in the vaults of heaven.

Probably few nebulae have such discordant references as NGC 7000.

Even its name is listed differently in observing manuals as either the North America or the North American Nebula. Some observers claim naked-eye sightings while some owners of large aperture telescopes admit they have difficulty in seeing it at all.

So, just how difficult is NGC 7000 to detect? As with all low surface brightness nebulae, the key is contrast. Haze, humidity, light pollution, moonlight and natural skyglow decrease contrast and render dim nebulae invisible against the sky. On nights when the Milky Way is clearly visible, NGC 7000 should be visible as a slightly brighter glow against the Milky Way to the unaided eye. Don't expect to detect its distinctive shape without some kind of optical aid. On nights when the Milky Way appears granular, indicating good transparency that permits the visibility of hundreds of faint stars, NGC 7000 is faintly defined in a pair of 7x50 binoculars. Take a few moments to examine the 'coast lines' and note that they are much darker than the surrounding star fields. These are dark nebulae. The *Atlantic* dark nebula is LDN 935, the *Pacific* side is not cataloged.

A definitive view comes when using a rich field telescope. In my 6 inch RFT with a 20mm Erfle eyepiece (30x with a 2° field). NGC 7000 and its neighbor IC 5067, the Pelican Nebula, are both dimly visible. A nebular filter increases the contrast and makes for, in my opinion, one of the most spectacular vistas in the sky. The listed magnitude values of these nebulae are about 13th

to 14th magnitude, but I think that both nebulae are brighter than this.

These large nebulae will not fit into a low power field of my 17½ inch telescope, but the large aperture reveals another visual aspect of their nature. They are strewn with a multitude of faint stars. The sheer number of stars across the face of NGC 7000 caused me to stop and marvel one night as I swept the northern Milky Way. A small gathering of stars in the *Obio* region of this nebula is also known as NGC 6996.

No written notes, photograph or sketch can convey the quiet euphoria you feel when you first spot these elusive nebulae. With that in mind, I encourage you to spend a night under the stars and look for yourself.

**OBSERVING SESSIONS AT
VILLA RICA – 1991**

Future observing sessions have been scheduled for the following dates:

Friday, November 1st
Saturday, December 7th

It is strongly recommended that you call Bill Snell at least one week prior to any observing session to let him know you are going to attend. You can still come to the observatory if you do not call but he will not be able to inform you of changes due to weather. Also, he will have some idea how many people to expect and hopes to plan better sessions as a result.

If none of the sessions listed above are convenient because of work, school or baby-sitting problems, please let him know and he will try to work around your schedule, if possible.

COMMITTEE MEMBERS WANTED!

We are in the process of establishing committee assignments for the new fiscal year, and we welcome

your participation. If you would like to assist with any of the following committees, contact our fearless leader, President Hal Crawford, at 320-9156:

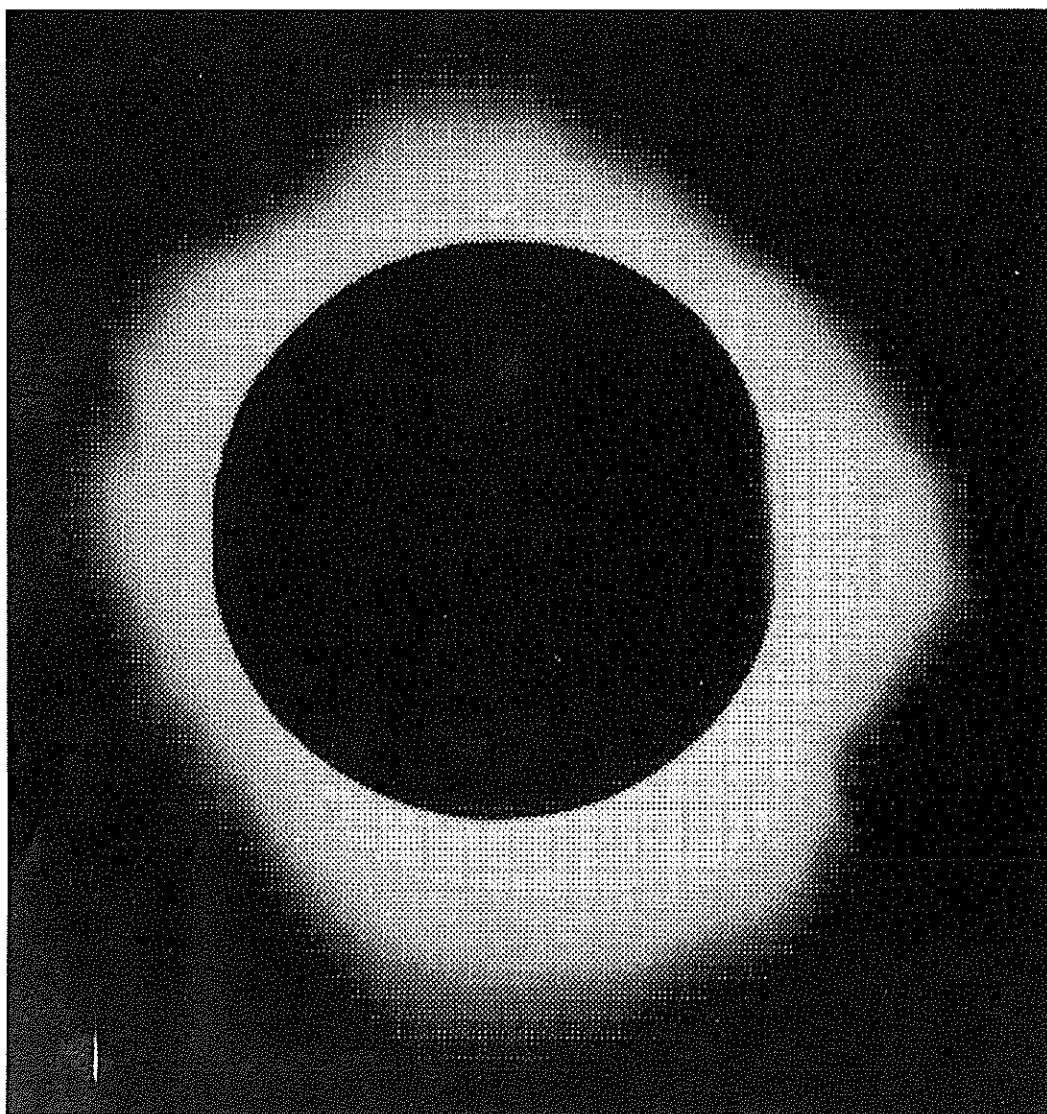
Membership	Publicity	Program
Observing	Newsletter	Light Pollution

Also, if there are other areas you would like to help with such as field trips, refreshments, observatory maintenance, be sure to let Hal know.

**ATLANTA ASTRONOMY CLUB, INC.
FINANCIAL REPORT**

	YEAR ENDED	
	8/31/91	8/31/90
CASH – BEGINNING	96.38	4.83
<u>RECEIPTS</u>		
DUES	3729.00	3885.00
SALE OF PUBLICATIONS	481.00	198.00
CONTRIBUTIONS	23.95	265.00
INTEREST	35.56	17.61
SALE OF EQUIPMENT	60.00	0.00
REFRESHMENTS	0.00	163.45
	4329.51	4529.06
<u>DISBURSEMENTS</u>		
SKY & TELESCOPE	1988.00	2170.00
NEWSLETTER	591.45	1015.83
SALE OF PUBLICATIONS	410.00	180.10
OBSERVATORY	175.58	261.26
ASTRONOMICAL LEAGUE	223.05	434.90
OFFICE EXPENSE	152.58	223.42
REFRESHMENTS	0.00	152.00
	<u>3540.66</u>	<u>4437.51</u>
CASH – ENDING	885.22	96.38

Looking at the above balance sheet, it doesn't take a rocket scientist to see the major source of our increased balance. Yes, it is the kind donation of printing resources provided by Skip's Printing of Conyers which allows us to have a nice looking newsletter, and only have to pay for postage. Once again, we thank you, Skip!



Mike Kazmierczak snapped this photograph during a sequence of 36 exposures during totality on July 11, 1991 outside of Atlixco, Mexico. He used a 1000mm f/8 telephoto lens attached to a Minolta X-370 camera to obtain this 1/4 second exposure using Kodacolor 25 film with conventional processing.

The Focal Point is published monthly by the Atlanta Astronomy Club, Inc. The AAC is a non-profit organization dedicated to the advancement of amateur astronomy. Meetings are held on the third Friday of each month (the second Friday in December) at the Bradley Observatory on the Agnes Scott College campus. Dues are \$35 annually and include a subscription to *Sky & Telescope* magazine and use of the observatory in Villa Rica.

Submissions: Article submissions are welcome and encouraged. Please deliver to the editor for consideration. Electronic submissions are accepted at mike%beow.uucp@gatech.edu. The submission deadline for the next issue is *November 1*.

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Editor: Dr. Mike Kazmierczak **Contributing Editor:** Hal Crawford

OFFICERS' PHONE NUMBERS

- | | | | |
|--|---------------------------------|------------------------|-------------------------------------|
| Hal Crawford..... <i>President</i> | 320-9156 | Mike Kazmierczak | <i>Corresponding Sec</i> ..760-8502 |
| Steve Gilbreath..... <i>Program Chairman</i> | 634-7466 | Bill Washburn | <i>Recording Sec</i> |
| Bill Snell | <i>Observing Chairman</i> | 633-4050 | Jackie Cochran |
| | | | <i>Treasurer</i> |
| | | | 955-0145 |

For Sale

A Tysco telescope is offered for sale. 400X, 125 mm, Model #8Z, in the box and brand new. Cost was \$900, asking price is \$450. Contact Terry Hendrix at 271-8819.

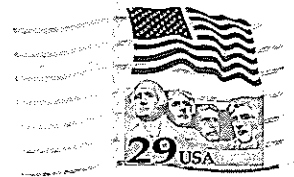
ASTRONOMY CLUB T-SHIRT DESIGN CONTEST

That's right, you read it correctly. The AAC needs a design for the new t-shirt we are going to produce. Since we don't want to listen to each dissatisfied person say, "I could have done better than that," we decided to have a contest. We are looking for a few good ideas. One need not be able to prepare the final artwork. The sketch of what each idea is what is desired. Of course, if you can prepare camera ready

artwork, so much the better. Now, why would you want to help design the new shirt? Aside from personal fame and glory, the winning designer will receive both a complimentary shirt and a one year subscription (new or extension) to *Sky & Telescope*.

The rules are:

- 1) One entry per membership.
- 2) All designs become the property of the Atlanta Astronomy Club, Inc.
- 3) Please submit designs to the Newsletter Editor for consideration (address below).
- 4) Please limit design to 3 colors. That's one color for the shirt and two colors for ink.
- 5) Void where prohibited by law.
- 6) All entries must be postmarked by November 19, 1991.



THE FOCAL POINT

First Class Delivery

Article submissions and address corrections to:

Mike Kazmierczak, Editor
1789 Brandy Drive
Conyers, GA 30208

W. Tom Buchanan
105 Carriage Station Cir.
Roswell, GA 30075

AAC membership renewals to:

Jackie Cochran, Treasurer
2854 Staunton Dr.
Marietta, GA 30067

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