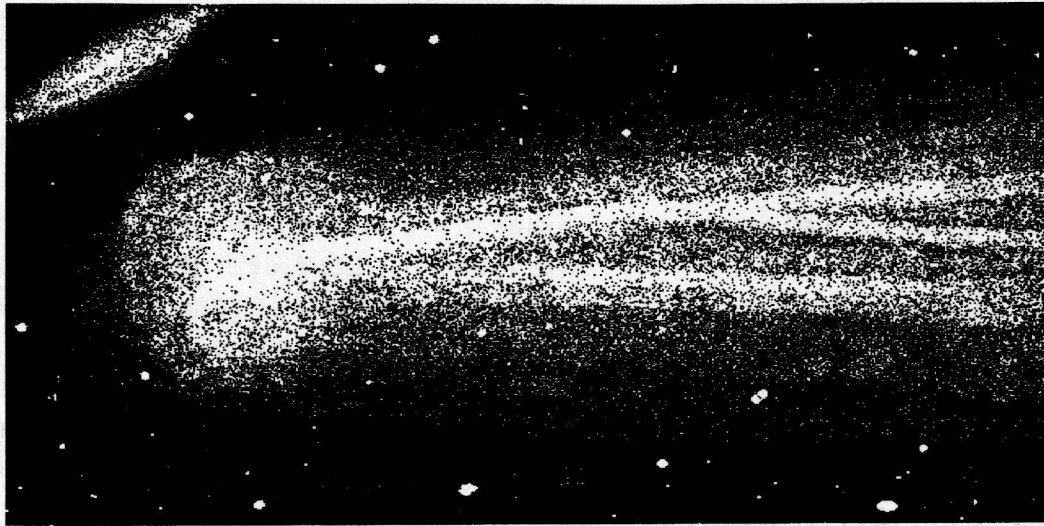


REFLECTIONS



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March , 1991

R. Tanner, ed.

University Lowbrow Astronomers

The University Lowbrow Astronomers is a club of astronomy enthusiasts which usually meets in the historic Detroit Observatory on the corner of Observatory and Ann Streets. The meetings start at 7:30 on the third Friday of each month and are open to the public. For further information, call Paul Etzler at 434-2574.

This Month:

Meeting, Detroit Observatory, March 15.
Music and Astronomy. Jody Ulrich, from Windsor, Ontario, will present a talk on music in astronomy and vice versa. The presentation will feature some excerpts from the music discussed.

Next Month:

Meeting, Detroit Observatory, April 19.
Election of Officers, We need a group of people to run for the offices!

Dues are due by end of April !

Please use the enclosed envelope to send your check to Dick Sider. The dues are \$12/year for individuals and \$15/year for families. Since the club treasury has been taking a beating with the telescope renovation, any extra **donations** that you can add would be greatly appreciated.

First Open House for 1991

March 16 and 23 will be the first open houses for the year. Since the 24" is not operational, all members are requested to bring their telescopes to the open houses (assuming it's clear).

Creating the Vice President Position(s)

The present duties of the president include providing leadership in the club and arranging for the programs at the meetings. Discussion at the last meeting indicated that it would make the job easier if the program responsibility were assigned to a new post such as **vice president**. Additionally, the program responsibility could be divided up into two positions, first and second vice presidents. This would mean each vice president would be responsible for only 6 programs. This will be discussed at the next meeting.

Astronomy Day - April 20

Astronomy Day is fast approaching, and ideas and volunteers are needed for what the Lowbrows could do to promote astronomy and the club. Brian Close has volunteered to take his Celestron to the Diag.

Telescope for Sale

Stan Watson has a early Odyssey 10" telescope for sale. The Odyssey is a Dobsonian telescope sold by Coulter Co. The telescope is a f4.5 newtonian system. He reports the telescope is in good condition and includes a 26mm RKE eyepiece and a finder scope. He is asking \$300. You can reach him at 662-4750 or 763-3725.

Update on Meteorite Search

Matt Linke has provided an update on the search for the meteor fragments which landed in the area near Gregory, northwest of Ann Arbor. Doug Murphy of Michigan State University has placed the organization of the search in the hands of a professional meteor hunter named Ron Farell. Mr. Farell has a great deal of experience in hunting down the fragments of a meteor fall. Several people have been interviewed who have witnessed a fall and 3 sites have been identified down to a area of a few

hundred yards. From the descriptions, the size of the largest pieces are expected to be around the size of muskmelons. Based on the interviews, the flight path has been refined and the area of the major pieces has been placed closer to Flint than Gregory. This means that larger pieces could be found. The pieces that are found are the property of the landowner. Several of the pieces have been promised to various researchers at the local universities.

Matt has 4 or 5 club members who have called him about participating in the search. Matt reports there will be a meeting about the third week in March finalizing the details of the search. Matt will call the club members about the exact date of the search, which is expected to be near the end of the month. If any other clubmembers are interested, please call Matt Linke at the University Exhibit Museum at 747-1381.

New 24' Drive and Electronics

The R.A. Retrofit effort now includes not only an amperage adjustment (so the board won't burn up again) but also an intermediate speed between guide correction and slew. This work should not delay the schedule.

Summary of Electronics made for 24 inch Telescope as of 2/15/91	R.A. Guide	Encoders	Dec Slew	Dec Guide	Interface	New Paddle	R.A. Slew	Pwr Supply	R.A. Retrofit
Mechanical Design	✓	Jun	✓	✓	✓	✓	Sep	✓	✿
Mechanical Built	✓	Aug	✓	✓	✓	✓	Dec	✓	Apr
Electrical Design	✓	Jun	✓	✓	✓	✓	Sep	✓	✿
Prototype	✓	Jul	✓	✓	✓	✓	Oct	✓	Mar
Circuitboard Design	✓	Aug	✓	✓	✓	✓	Nov	✓	Mar
Circuitboard Hardware	✓	Aug	✓	✓	✓	✓	Nov	✓	Mar
Circuitboard Built	✓	Aug	✓	✓	✓	✓	Nov	Apr	Apr
Installation	✓	Sep	May	May	May	May	Dec	May	May

Jan, Feb, ... => Item to be finished before this Month's Meeting

✓ = Previously finished.

✿ = Finished since last Meeting.

Newsletter Costs and Dues

The cost of the copying and mailing the newsletter takes the major part of the dues the members pay each year. With the dues coming due next month and the recent postage increase, this a good time to examine just how major this part is. This newsletter is sent to 77 various organizations and members. I normally make about five extra copies for people that may show up at the meeting or new members. The copying costs for 82 issues, each with 3 double sided pages on colored paper is about \$31. The 76 first class stamps cost about \$22. Thus, **each month our newsletter costs \$53**. Since we have about 55 members, each paying \$12 per year or \$1 per month, **we are collecting \$55 per month**.

It doesn't take a rocket scientist to figure out that the club dues just covers the cost of the newsletter, leaving very little for the 24" and other club activities. The \$2 per month extra generates about \$24 per year for the rest of the clubs activities. The level of money needed currently for the 24" is relatively large because of the renovation going on. But just figuring that the mirror will likely require recoating every 6 years or so, means we will need to raise about \$300 every 6 years, or \$50 per year/ \$4 per month. This seems to me to be a very unsatisfactory situation.

There are several alternatives;

- Reduce the cost of the newsletter by reducing size, changing to white paper, and finding someone to provide the copying for a cheaper cost. Removing one page from the newsletter will save \$5 per month. Changing to white paper will also save about \$5 per month. I think both of these would reduce the appeal of the newsletter but would like to hear from the members. I haven't visited every copy place to try and get a better price but that is the next step.

- Have most of the members pick up their newsletter at the meeting. This would save about half of the postage cost (\$11), but, these people would not be reminded of the meeting which I understand is very popular. The Warren Astronomy club uses this method, with members wishing to receive their newsletter by mail paying an extra \$5 per year for postage.

- Raise the dues. This is an easy out and reduces the pressure to make the newsletter a more efficient mechanism for getting meeting notices and club news to the members.

I think a discussion at one of the next meetings on what other alternatives may be available and what the members would like the newsletter to be would be in order.

Computers in Astronomy Subgroup

The first meeting of the Computers in Astronomy Subgroup was held at Stuart Cohen's house on March 1 with 6 members in attendance. The group consisted of Stuart Cohen, Steve Musko, Doug Nelle, Ron Avers, Kay Wilks, and Roger Tanner. The group discussed several possible topics for future meetings.

Stuart Cohen discussed an interest in using a computer to control a telescope for pointing and give it a more intelligent interface, (with possible application on the new drive system for the Peach Mountain 24"). Another application he was interested in was using a computer to support and control a CCD camera on the telescope.

Everybody showed an interest in finding out what astronomy software was available and what it can do. Kay Wilks offered the use of her bulletin board as a storage for software and a central clearing house. The board runs 1200/2400/9600 baud and uses PKZIP for file compression.

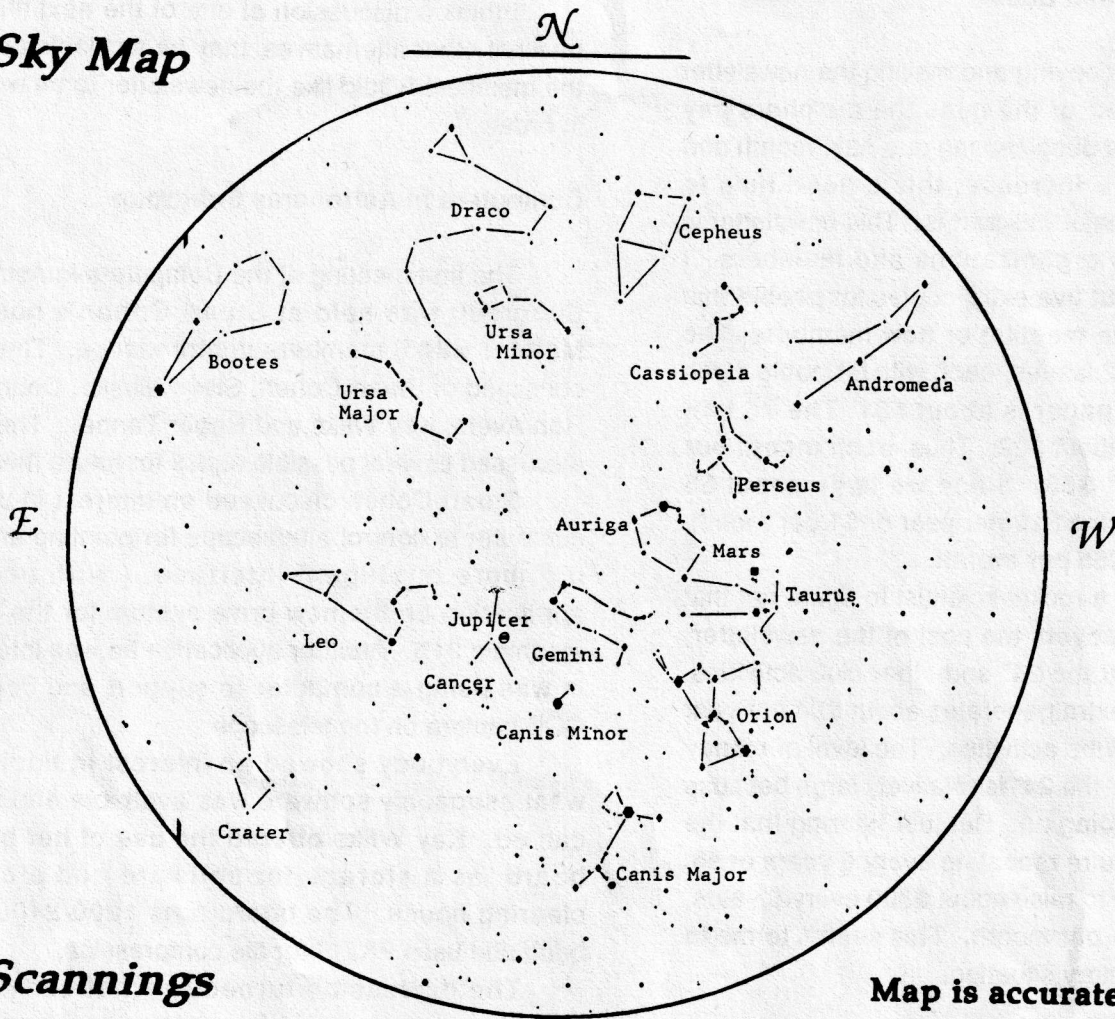
The discussion turned to what software is available on the various information services. Steve Musko volunteered to check GENIE for astronomy software.

A quick survey of what the group was doing with their computers turned up everything from Commodore 64's running galaxy interaction programs to IBM clones doing diagonal mirror size and ephemeris calculations. Other members had CoCo, Tandy 1000, Macintosh, and Atari ST computers with PC clones holding the majority position. Some members had access to more powerful machines at their work.

The **next meeting** will be held at Doug Nelle's (996-8784) house on **April 1**, (honest). Some of the members will be bringing over their more portable computers and demonstrating any astronomy software they have bought or written. Any other members that are interested in joining or just curious are invited. There will be further discussion on the desired organization and objectives of the group.

- R. Tanner (981-0134)

Sky Map



Sky Scannings

Map is accurate for:
Midnight on January 15
10:00 p.m. on Feb. 15
8:00 p.m. on Mar. 15

Sun Data		
Date	Sunrise	Sunset
01-01-91	8:06 AM	5:04 PM
01-15-91	8:03 AM	5:19 PM
01-30-91	7:52 AM	5:38 PM
02-01-91	7:49 AM	5:40 PM
02-15-91	7:32 AM	6:59 PM
02-28-91	7:13 AM	6:15 PM
03-01-91	7:11 AM	6:17 PM
03-15-91	6:48 AM	6:33 PM
03-30-91	6:27 AM	6:50 PM

Moon Data			
Date	Phase	Rise	Set
01-07-91	3rd Qtr.	1:20 AM	11:44 AM
01-15-91	New	8:07 AM	5:24 PM
01-23-91	1st Qtr.	11:27 AM	3:10 AM (24)
01-30-91	Full	6:41 PM	8:38 AM (31)
02-06-91	3rd Qtr.	2:16 AM	11:11 AM
02-14-91	New	7:30 AM	6:25 PM
02-21-91	1st Qtr.	10:52 AM	3:18 AM (22)
02-28-91	Full	6:43 PM	7:27 AM (1)
03-08-91	3rd Qtr.	2:50 AM	11:19 AM
03-16-91	New	6:43 AM	7:31 PM
03-23-91	1st Qtr.	11:53 AM	3:42 AM (24)
03-30-91	Full	7:49 PM	6:44 AM (31)

Rise and set times for the visible planets at mid-month			
All times are Eastern Standard Time			
Planet	Date	Rise	Set
Mercury	01-15-91	6:28 AM	3:39 PM
Venus	01-15-91	9:08 AM	6:54 PM
Mars	01-15-91	1:09 PM	4:15 AM (16th)
Jupiter	01-15-91	6:33 PM	9:04 AM (16th)
Saturn	01-15-91	8:15 AM	5:36 PM
Mercury	02-15-91	7:16 AM	5:03 PM
Venus	02-15-91	8:41 AM	8:14 PM
Mars	02-15-91	11:38 AM	2:59 AM (16th)
Jupiter	02-15-91	4:10 PM	6:51 AM (16th)
Saturn	02-15-91	6:25 AM	3:52 PM
Mercury	03-15-91	7:18 AM	7:46 PM
Venus	03-15-91	8:02 AM	9:22 PM
Mars	03-15-91	10:37 AM	2:10 AM (16th)
Jupiter	03-15-91	2:07 PM	4:53 AM (16th)
Saturn	03-15-91	4:44 AM	2:16 PM

Places:

The Detroit Observatory is at the corner of Observatory and Ann Streets in Ann Arbor, across from the old U of M Main Hospital. The Detroit Observatory is an Historic Building which houses a 19th century 12-inch refractor and a 6-inch transit instrument.

The Peach Mountain Observatory is the home of the U of M radio telescope and the 24-inch McMath telescope used by the Lowbrows. This observatory is located northwest of Ann Arbor, off North Territorial Road, West of Dexter-Pickney Road. The entrance is just west of Sportsman's party store and is marked by a small maize and blue university sign. Go through the gate and follow the gravel road. Once parked at the observatory parking lot, follow the path away from the radio telescope and around the fenced in compound to the telescope.

Times:

The monthly meetings are held on the 3rd Friday of each month at 7:30 pm. Meetings are either at the Detroit Observatory or at the Peach Mountain Observatory. Meetings held at Peach Mountain are cancelled if the sky is not clear at sunset.

Public Star parties (Open Houses) are held on the Saturdays nearest the new moon at the Peach Mountain Observatory. Star parties are cancelled if the sky is not clear at sunset. Many members will bring their own telescopes. Your scope is welcome. Wear warm clothes for the season and bring insect repellent. The next scheduled Open House is March 16 and 23 .

Dues:

Membership in the Lowbrow Astronomy Club is \$12/yr for individuals and \$15/yr for families. Among other things, this entitles you to use the club telescope after some training.

Magazines:

The Lowbrow Astronomy Club offers discount subscriptions to popular astronomy magazines:

Sky and Telescope : \$18/yr.

Astronomy : \$14/yr., 12 issues.

Deep Sky : \$8/yr., 4 issues.

Odyssey : \$10/yr., 12 issues.

Telescope Making : \$8/yr., 4 issues.

All except Sky and Telescope require 5 club members to subscribe for the discounts. Contact Dick Sider (663-3968) for more info.

Sky Scannings:

The *Sky Scannings* and *Sky Map* section in the issues of the *REFLECTIONS* are produced by Matt Linke of the U of M Exhibit Museum.

Newsletter Contributions:

Please send any information, short articles, or drawings to the address below. The closing date is April 9th. Currently there are not many people contributing and we could use some fresh observations from the members.

University Lowbrow Astronomers Reflections
1770 Walnut Ridge Circle
Canton, Mich. 48187

Important Numbers:

President: Paul Etzler 434-2574
Treasurer: Richard Sider 663-3968
Observatory: Bob Klose 761-8488
Newsletter: Roger Tanner 981-0134
Membership: Ron Avers 426-0375

Peach Mountain Keyholders:

Tom Ryan 662-4188

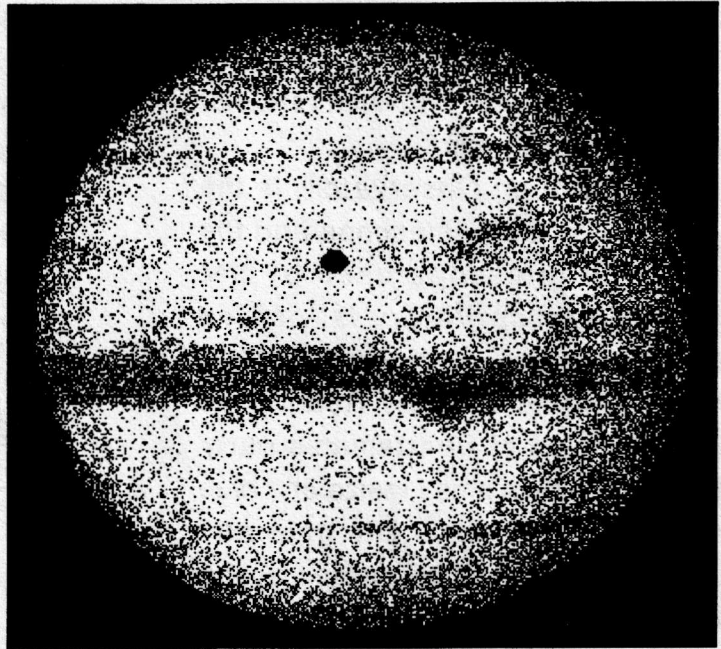
Fred Schebor 426-2363

Doug Nelle 996-8784

Monthly Meeting:

**MUSIC AND
ASTRONOMY**

**Detroit Observatory
Observatory & Ann St.
Ann Arbor, Mich.**



**University Lowbrow Astronomers
9287 Chestnut Circle
Dexter, MI 48130**