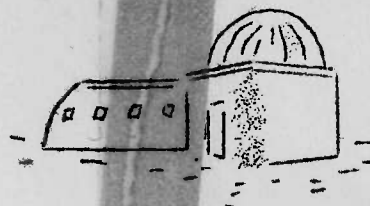


THE

DOUBLE DOME

A Publication of the
MILWAUKEE ASTRONOMICAL SOCIETY



Jan 20

1961

Mr. Thomas McFarland
will speak on
"Extra-Galactic Systems"

Mr. McFarland is a member of our Society. He is a graduate student at the University of Wisconsin majoring in mathematics. The meeting will begin at 7:30 and will be in the conference room of the downtown library. Try to be there on time since the length of the meeting is limited.

Bob James to New Mexico

At his meeting Bob James will turn the gavel over to Vice-President Dick Wend. He will be leaving Milwaukee early in February, and will be going to Las Cruces to do antenna design research for New Mexico State University.

New Mirror Fund

Dick Wend reports that so far only \$57 has been taken in, although several people who have pledged themselves have not come through yet. He would like to remind all those who did agree to donate in January to send in their contribution. The mirror has not been ordered yet. The delay is to see if Mr. Frank Vaughn will make the mirror for us. If not, it will be ordered from Coast Instrument Co.

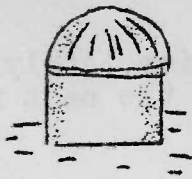
Observatory Notes

Our Moonwatch team has just completed ten days of intensive activity searching for 1959 Delta2. It has been lost for several months and since its radios are dead, optical means offered the only possibility of rediscovering it. A nationwide alert was carried out last week. The satellite was first observed on Sunday, January 8 but a timing was not obtained. It was seen again on the next Wednesday and a position was recorded. The data was sent to the Smithsonian and within an hour congratulations were cabled to Mr. Halbach.

During the week of Jan. 16-23, nine satellites will be passing over throughout the early morning hours. There are over fourteen passes. Anybody interested in volunteering to help observe some of these, please contact Mr. Halbach.

Occultations

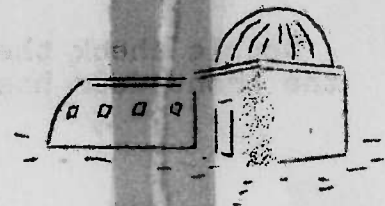
Forms for observing the occultations during the first four months of 1961 are out at the observatory. These are corrected for the Milwaukee area in general, so they may be used at home. If they are used there, be sure to note your position accurately on them.



THE

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Feb 1961

Professor E.E. Miller
will speak on
"ATMOSPHERIC OPTICS"

The meeting will be held in the east conference room of the Central Library. It will begin at 7:15 on February 17. Professor Miller is in the physics department of the University of Wisconsin. He teaches courses in optical physics. In the past, he helped design radar units for the government. One of his principal interests is atmospheric optical phenomena which he has observed and studied widely. He is married and lives in Madison.

Mirror Fund

The new mirror has been ordered from the Cave Optical Co. We will get a new mirror, mirror cell, and diagonal for \$240. Those of you who promised to donate, please send in your donation. Only a few members have contributed so far. Only small donations from a fairly substantial number of members would be needed to finance this project. About \$60 is still needed. Please send your contributions to Dick Wend, 8800 W. Lincoln Ave.

Regional Convention

The University of Illinois Astronomical Society will sponsor the North-Central Region convention over the weekend of April 28-30 in Urbana. The bulk of the program will be on Saturday, April 29. Registration begins that morning and costs \$.50. There will be two paper sessions and a banquet (\$2.00) in the evening. Sunday morning there will be a three hour excursion tour to the UofI's radio telescope (\$2.25). This giant instrument has a parabolic reflecting surface measuring 400 by 600 feet. It is completed except for the installation of the electrical equipment. Society members are invited to submit papers. They should be kept under 20 minutes in length. Further information will be given at the meeting Friday. (There will also be a tour of the newly completed nuclear reactor in Urbana for the first ninety people registering at the convention.)

Observatory Notes

Whoever borrowed the Astro-Camera which was in the storage room out at the Observatory, call Dick Wend and tell him you have it. Equipment is not to be removed from the Observatory unless you put a note in the Log stating that you have it.

Double check the Observatory doors when you leave. Twice, lately, the front door has been found open by people coming out the next night

Canadian Handbooks

Canadian Observers' Handbooks for 1961 have been saved for the past two months for the following:

Bishop	Ceolla	Heisler	Konig	Lawrence	Ries
Brown	Garrê	Hernday	Kubash	Lucas	Russell
Brunkella	Goetzman	Kebbekus	Kuetemeyer	Mathies	Tonn Zanow

Any not called for at the next meeting will be sold on a first come, first served basis. If you still want yours and cannot come to the meeting Friday, contact Mr. Ball before the meeting.

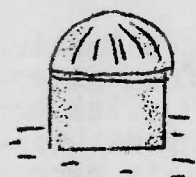
National Convention Exhibit

We would like to have a display of what the Society has been doing at the Astronomical League Convention in Detroit, July 1-3. Anyone interested in helping prepare an exhibit should contact Doug Bash.



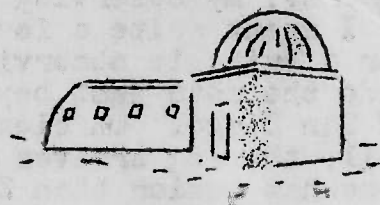
MR. PAUL ZANOW,
3373 N. FORTY-SIXTH STREET,
MILWAUKEE 16, WIS.





THE

DOUBLE DOME



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MILWAUKEE ASTRONOMICAL SOCIETY

MARCH

1961

PROF. WILLIAM F. READ
will speak on
"FIREBALLS AND METEORITES"

The meeting will be at the Central Library on March 17. Our speaker comes to us from the Geology Department of Lawrence College, Appleton. He is director of the American Meteor Society. All our fireball reports and the meteor counts of the AAVSO are sent to him. Walter Kaminski has promised to make a thorough study of the lightswitches before the meeting.

CONVENTIONS

Don't forget the regional convention April 29-30. There is no deadline for registration, but reservations for banquet (\$2.00) must be in by April 1; the excursion reservations must be in by April 10 (\$2.25). A list will be available at the next meeting for those interested.

The national AL convention will be held July 1-3 at the Henrose Hotel, Detroit, Mich. Information on accommodations, etc. will be available at the meeting and in subsequent D-D's.

STAFF MEETING

There will be a special staff meeting April 7. Plans will be discussed for a work party Saturday April 22. It will start at 8:30 PM at the Observatory and will be for the purpose of deciding what to do and forming teams to do it. Meeting-7th Work Party-22cd

THE LOLLING ASTRONOMER

Most of you who have been members of the MAS for the last five years or longer are familiar with Gordon Hall. He lived in Milwaukee for quite a few years and commuted to our meetings while a student at UW. He left Milwaukee in '59 and went to San Diego where he works for Convair Astronautics. From time to time, we will print his reports on observing and conditions in general on the coast. This is the first!

"As most of you know, I left Milwaukee in the summer of '59. Tom Osypowski and I drove to the Denver convention; then he flew back and I continued on to San Diego. I brought with me my 6" reflector, but no mounting. The scope lay on my living room floor for several months while I planned and replanned a mount for it. By the March (1960) eclipse I had finished a heavy, cumbersome, but extremely rigid, mounting.

The night of the eclipse I made preparations for observing, but southern California was completely clouded over.

While still in Milwaukee I had been amply assured by the San Diego Chamber of Commerce that smog was not a problem there. They were right, smog is slight, but somehow they forgot to mention the fog that rolls in at night. This and the lights from the small business district around the corner meant that I had to get out of town for any serious observing. Due to the extreme effort and necessary positions of the planets that were required for me to get the scope (and extremely rigid mount) into

my Chev, my observing fell off to almost nothing.

I spent quite a few weekends driving around the countryside looking for a suitable observing site. I did most of my observing from alongside the road just beyond Poway, a little community about 20 miles north of San Diego. On clear nights the sky is very dark, on foggy nights--well, the fog arrives a little later than it does in town. This road is somewhat busier than KX so I was bothered by headlights. For the Sept. eclipse I needed something that was free of fog and light, and finally decided on Cuymaca Rancho State Park, 50 miles east of here and about 5,000 feet high. Except for the distance, this site was ideal. M31, for example, is not the know-you-see-it-now-you-don't fuzzy spot I had seen it naked eye before, but big, bright, and elliptical. On eclipse night, the seeing and transparency were excellent. At dawn I wrestled my scope back into the car, drove home, and slept all day.

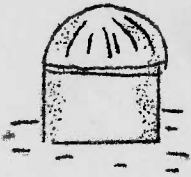
Soon after, I sold my Chev and quickly discovered that no amount of effort would get the mounting into my new car. Beautifully rigid as it was, I was also pretty tired of carrying this heavy mounting from my upstairs apartment out to the car. Now, several months later, I'm again in the planning and replanning stage of mount building. However, I'm fairly well along now and in a month or two should be able to give you a good description of what the seeing is like out here.

I'm also interested in seeing how the seeing compares between the high, wooded Cuymaca park and the desert. I spent Christmas weekend on the Anza-Borrego Desert and was very impressed with the transparency. The Perseus clusters and the milky way were quite bright and clear naked eye in spite of a first quarter moon on the meridian. Stars below 45° were twinkling quite furiously, but this was just after sunset and the desert was cooling off from the heat of the day. I was too tired to stay up that night and watch, but I suspect that just before dawn the seeing would be quite good. I hope to check on this when I get my scope back in condition.--Gordy Hall

M-34

MR. AND MRS. STEPHEN KLIMAN,
2809 N. GRANT BLYD.,
MILWAUKEE 10, WIS.

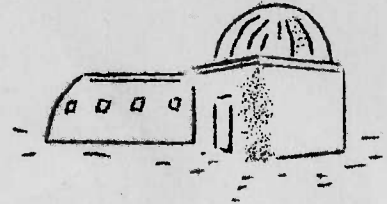




THE

DOUBLE DOME

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April 1961

DR. CHARLES M. HUFFER
will speak on
"Eclipsing Binaries"

Dr. Huffer is a professor in the department of astronomy at UW. He has currently been working on eclipsing binary star systems, employing the new, million dollar 1604 digital computer of Wisconsin's Numerical Analysis Lab. The meeting will begin promptly at 7:30 at the Central library, Friday, April 21.

Work Party

We would like a large turnout for the spring cleaning job which will be done Saturday, April 22. Please arrive early, about 7AM, if possible. Bring a lunch; hot and cold drinks will be provided. If anyone needs a ride, arrange for it at the meeting or call someone who is going.

Regional Convention

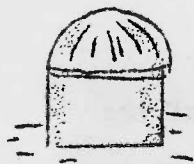
Your registration for the convention April 28-30 should already be in, however, there is no deadline on registration, so even if you haven't registered, you can still go. The University of Illinois has rooms available in a residence hall just five blocks away from the meeting place, the University YMCA. \$3.00-a person-doubles \$4.25-singles. Make reservations as soon as possible. There will be a list of area motels at the meeting. Final arrangements for transportation will also be made at the meeting. Anyone needing or who can offer a ride, but who will not be at the meeting, please contact Dick Wend; Li-52571

Dinner Meeting-May 5

Friday, May 5, there will be an open board meeting at the Golden Anchorage Capitol Court. All members and their families are invited. This meeting is designed to give persons interested in seeing how the board acts, a chance to do so. The price for dinner will be \$3.00. Reservations are necessary, a list will be passed around at the meeting, if you cannot be there, contact Mrs. Kliman by April 22. If you make a reservation, you are expected to attend.

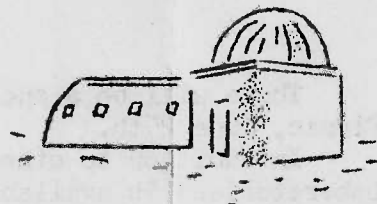
New Mirror

The new mirror is almost completed. A progress report will be given at the next meeting. Thanks to all who helped to make the drive a success.



THE

DOUBLE DOME



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1964

ANNUAL PICNIC SUNDAY JUNE 25 AT THE OBSERVATORY!!

This is our main social event of the year; renew old friendships and make some new ones! Bring your picnic supper (the Society will furnish Soda Pop) and plan to arrive anytime during the afternoon.

NEW MEMBERS, NOTE: here's your best opportunity to get acquainted with fellow members, officers, and the observatory. Come on out, and ask a lot of questions.

GUEST OF HONOR will be Miss Edith Quade of the Milwaukee Public Museum. As you know, the Museum is planning a Planetarium that will be "one of the best in the country." As yet, no formal decisions have been made. After supper, around 6:30 PM or so, we will have a "Planetarium Symposium". This is our opportunity to discuss with Miss Quade what we would like to have in the Planetarium in the way of telescope making classes, special exhibits, lectures, demonstrations, meeting room, sales counter, etc. Miss Quade is anxious to hear our views, and also to meet our members and inspect our observatory.

Anyone needing transportation should call the Picnic Chairman, Mr. Carl Matthies at SP 4 - 8334. Also, anyone able to offer a ride should notify Mr. Matthies.

The picnic will be held indoors if it rains (you should excuse the expression).

NEW 12 $\frac{1}{2}$ " CAVE MIRROR IS HERE!

Adaptations are being made prior to installation of the new mirror cell and diagonal. Focal length is 108.875". It is planned to have the scope "ready to go" by the date of the picnic.

A list of the 25 members whose donations made this mirror possible will be posted on the scope.

Predictions for Lunar Occultations.

There are a few copies left for distribution at the Picnic, and a copy is on the bulletin board. If you have a telescope at home, and have access to a stop watch and a short wave radio (for time signals), ask Dick Wend for a copy of the predictions. You can also calculate occultation times for your location in a few minutes from the "OCCULTATION SUPPLEMENT" in the December 1960 Sky & Telescope; it covers occultations for the entire year 1961.

OPEN HOUSE

There will be two more "Open House" nights this summer (After the June 19 Open House.) The dates are Mondays, July 17 and August 21. In case of bad weather, the Wednesday immediately following is the alternate date. Guides will be needed, and if you can bring a telescope out, fine.

(OVER)

MEETING OF THE JUNIORS

There will be a special meeting of the Juniors on the afternoon of the Picnic, June 25th.

In addition to other business, a 3" Saturn Refractor (made by Tinsley Laboratories) is available for a loan to a Junior who is interested in becoming a serious observer. See Jerome Walsh about this if you are interested.

OBSERVING PROGRAMS

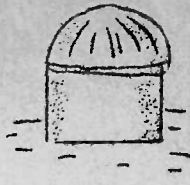
Jupiter is moving into a favorable observing position, and meridian transits of surface markings should be sent to Mr. Phil Glaser, 400 E. Park Ave., Menomonee Falls, Wisc. Mr. Glaser is Jupiter Recorder for the American Lunar and Planetary Observers. Further information at the picnic, if you need it. (Unlike lunar occultations, a stop watch and short wave radio are not needed for timing transits on Jupiter.)

The mosquito crop is alleged to be below last year's level, so variable star observations and satellite tracking should be more endurable. Learn about the latest plans for housing the new satellite tracking equipment at the picnic.

SEE YOU AT THE PICNIC!

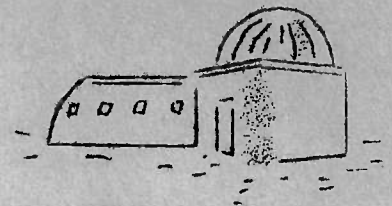


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THE

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- MEETING NOTICE -

Mr. Ronald Jones, President of the Racine Astronomical Society, will speak on "The Building and Construction of the Racine Observatory and 16" Instrument" This is a cassegrain reflector, completed just this year. We have talked with Racine members at Regional Conventions, now we can hear about their new 'scope. The meeting will be held Friday October 20 in the East Conference room of the downtown library at 7:30 P.M.

* FIELD TRIP FRIDAY NOVEMBER 10! *

We have arranged with the Adler Planetarium in Chicago to present a special lecture and planetarium demonstration tailored for Astronomical Society members. This will be an interesting session for us; the usual lectures are aimed at the general public - with no previous knowledge of astronomy.

Busses will be chartered, and will leave from the vicinity of Southgate (exact place to be announced) at 6 PM. Cost will be \$3.50 per person.

This amount includes \$3.00 bus fare and 50¢ for the special lecture. The Planetarium is charging a flat \$75.00 fee, so we have invited the Racine and Kenosha Astronomical Societies to come along. If we total 150 people, the special fee will come to 50¢ per person.

Sign up for the trip at the meeting. If you can't attend, the \$3.50 can be mailed to any of these three officers:

Richard Wend - 8800 W. Lincoln Ave. (19)
Mrs. Carolyn Kliman - 2809 N. Grant Blvd. (10)
A. R. Ball - 3749 W. Sarnow St. (8)

Make your reservations as soon as possible, so we will know how many busses to charter.

- OBSERVATORY SCHEDULE -

At the September 29 staff meeting at the observatory, the following members expressed preference for specific nights:

MONDAY: William O. Zinbel - BL-8-1251
WEDNESDAY: Dennis Matthies - SP-4-3334
THURSDAY: Harry Pease - SU-2-6544
James Lund - EV-4-0427
FRIDAY: A. R. Ball - DI-4-0645
Leonard Schaefer - SU-6-8220
SATURDAY: Richard Wend - LI-5-2571
after midnight: Jerome Kunicki AT2-7823
SUNDAY : Ray Zit - GL-3-5068

* LOST AND FOUND *

After the last meeting, a golfer's automatic scorer was found near the coat rack. Owner may pick it up at the meeting.

(OVER)

- PHOTOGRAPHER'S, NOTE! -

Many of the spectroscopic plates at the Observatory were found to be fogged during a recent darkroom test.

Henceforth, glass plates will not be kept at the observatory. They will be stored in a freezer. Members wishing to use these plates should obtain them in advance from the Assistant Observatory Director, Richard Wend.

* HELP WANTED *

The monthly Double Dome is without an Editor, since Doug Bash is in Baltimore attending school. A member with a typewriter is needed to assume this post and help get out the meeting notice on time. Applicants see the President.

Francis Wilford has also left Milwaukee, to attend a Seminary in Illinois. Francis was the Librarian of the society, and the books at the Observatory are in need of a custodian.

For some time, now, the observatory copy of "The Planet Jupiter" by Peek has been missing. Does anyone recall where it is?

Treasurer A. R. Ball will be collecting dues at the meeting October 20.

MR. AND MRS. STEPHEN KLIMAN,
2809 N. GRANT BLVD.,
MILWAUKEE 10, WIS.

E-24



The meeting of the Milwaukee Astronomical Society, on Friday December 15, will be held in the Conference Room of the Milwaukee Public Library on 8th and Wisconsin.

DOUBLE FEATURE AT THIS MEETING: "The Story of Palomar", a film describing the making and installation of the 200" telescope in California, and "Stars and Star Systems", a film describing the use of the photoelectric photometer, among other things.

Those interested in Lunar, Photographic, or Jupiter sections should try to arrive early and stay a bit after the regular meeting to talk about these specialties in small groups.

- Red Face Department -

Jupiter observers now start observing as soon as the sun is low enough to permit the planet to be seen, as Jupiter sets rather early. Usually Jupiter is the first object to appear in the southern sky as the sun sinks in the west - usually. A couple of Saturdays ago, Dick Wend and Peter Henschel came out to the observatory about 3 PM to paint the 1 x 6 board around the new roof for the future satellite building. After a quick lunch, about 4:30 PM, Dick, Peter, and Jerry Walsh started peering from the dome slit for the first glimpse of Jupiter. Someone hollered "there it is!" and the telescope was swung into position. Dick climbed the ladder, got the image first in the finder then in the 28mm eyepiece. Instead of the usual polar-flattened disk of Jupiter, the scope showed a distorted image, like a blunt triangle. Severe misalignment or undue strain might cause a poor image; most telescope enthusiasts have seen diagrams of the types of image distortion caused by various defects. However, everything seemed to be in order. Jerry jokingly remarked "maybe it's a Flying saucer". From this comment it was only a short step to the solution. It wasn't a distorted image of Jupiter, it was an undistorted image of a skyhook balloon, illuminated by the setting sun, and upside down in the eyepiece.

Tom Pope, director of the Photographic section, recently took some good lunar photographs by eyepiece projection with the 12 $\frac{1}{2}$ " scope. Prints were compared with the Photographic Lunar Atlas of the University of Chicago, and every thing that appeared in the atlas of this particular area could be found on Tom's prints. The Atlas, of course, covers only selected phases of the moon, and does not show every area to it's best advantage. The Atlas photographs are taken by the major observatories, however, and a favorable comparison means a fine photograph.

Before now, people have been taking groups to the observatory without contacting Jerry Walsh who is in charge of observatory visits. From now on anyone wishing to take a group to the observatory must contact Jerry before doing so. He can be reached at Flagstone 4-9398. Your co-operation will be appreciated.

• New Editor •

Anyone having any information concerning the Society which they would want published, can contact the new editor, Joe Sara at Edge-
road 2-0220.

(over)

Members who have inadvertently taken home the name tags passed out before each meeting are asked to bring them with them when they come to the next meeting.

Any person who has not been able to secure a copy of Planetary Phenomenon for 1962 can purchase a package including this publication plus star maps for 15¢ from the museum check room. Mr. Herbert Cornell, who has published this chart for a few years, should be congratulated for his excellent work.

- Junior Section -

The Junior Section of the Milwaukee Astronomical Society wishes to tell members who are 18 or under about their club. The Junior Section resembles the Senior Society in that it has its own paper, the Junior Astronomer, its own 10-inch telescope at the observatory, and it has an observing program in the summer. Anyone interested in joining the club should attend the next meeting at 6:45 in the Conference Room before the regular meeting, or call the President, Jerry Walsh, at Flagstone 4-9398.

MR. AND MRS. STEPHEN KLIMAN, R-34
2809 N. GRANT BLVD.,
MILWAUKEE 10, WIS.

