

THE PRESIDENT'S CORNER

Dr. Gerhard Blass.

Obviously the acquisition of astronomical knowledge went, through the centuries, hand in hand with the development of telescopes. No matter how good the illustrations in any astronomical textbook are, they can never match the experiences of your encounter with reality while looking through a telescope at any of the many fascinating celestial objects. Nobody can describe to you this phenomenon of living light! And how marvelous do you feel if the telescope you are looking through, is of your own making!

Well, buy a mirror blank, try to grind it into a precision mirror; sample some disappointment. All the more you will then appreciate the help you can get in the Detroit Astronomical Society. There are experts who can teach and advise you; there are the proper tools for the work; there is equipment for testing your mirror; and, above all, there are people who have already built their telescopes - - - it is awfully encouraging to know experienced people who already succeeded in the struggle you are fighting right now.

And after you have finished your telescope, what are you going to do then? Pack it away, let it collect dust? Let your membership in the Detroit Astronomical Society lapse? After all, you finished your job! Didn't you?

Unfortunately, some people do exactly that. They forget all about astronomy; they do not realize that now, equipped with a new telescope, they should start a new era of activity in their lives.

TWO BIG D.A.S. DATES IN APRIL

April 21 - Sunday Meeting at U of D

April 27 - Saturday - D.A.S. Annual at the Whittier Hotel

Sunday Meeting MARCH 10 at U.of D. Science Bldg.

Has your curiosity led you into that realm 'The Nature of Time and Space in the Universe'? If it has, and you would like to pursue the subject a bit further, here is a brief outline to to be covered at the March 10 Sunday Meeting

be covered at the March 10 Sunday Meeting at U of D in the talk bearing that title:

- I. Nature of Time
- II. Nature of Space
 - a. Curvature of Space
 - b. Finite Models of the Universe-
 - c. Expansion of the Universe.

Dr. William M. Sacks is Speaker for the day. He received his B.A. in Physics, May, 1959, Rice Institute; Ph.D. in Astronomy, June, 1966, Harvard University; and, is presently teaching at the University of Detroit.

Dr. Sacks welcomes a question and answer period at the end of the program. Invite your friends to this informative and enjoyable March 10 Meeting. See you at 3:15 p.m.

GREAT LAKES REGIONAL CONVENTION

Meetings and exhibits will be located at the Grand Rapids Public Museum, which also includes a Planetarium. The air conditioned meeting room seats over 300 people. Part of the program will include a field trip to the new observatory - plan to attend August 9-10-11.

There will be more information in the near future concerning accommodations (includes camping info, too).

Get your projects finished early - - there will soon be news on entering them in this 1968 Convention.

MARCH Program of Events at Sylvia Allen Center

Friday, March 1, 1968

8:00 p.m. - 'Up and Down With the Sun'

Speaker: A. G. Leigh LaChapelle

Friday, March 8, 1968

8:00 p.m. - 'Men Behind the Mirrors'

Speaker: C. D. 'Doc' Marshall

SUNDAY, MARCH 10, 3:15 p.m.

Monthly Meeting at U of D Science Bldg. 'The Nature of Time and Space in the Universe'

Speaker: Dr. William M. Sacks

Friday, March 15, 1968

8:00 p.m. - Observing Class Chris Edsall

8:30 p.m. - Talk

Friday, March 22, 1968

8:00 p.m. - Observing Class

Speaker: Chris Edsall

8:30 p.m. - Talk - Norman Williams

Friday, March 29, 1968

8:30 p.m. - 'Would You Believe?'

Speaker: M. Lawrence Applebaum

We wish to welcome

. . . during this expanded Month of February the following new members:

Ted Mihalciuc heard about the D.A.S. from club member Mark Walch. Ted has a work shop and test stand at home (in Warren) and is making a 12 inch Newtonian. We're glad your cousin Mark introduced you to the D.A.S.

Anne Olmstead became interested in astronomy while reviewing the various hobbies her son Richard would choose. Anne was a member of the 1966 Eclipse Expedition and never misses a Sunday Meeting at U. of D. Welcome.

Jack Seavitt, Science teacher at Burroughs Junior High, heard about the D.A.S. from another teacher who heard about the D.A.S. from his barber! Jack has already brought some of his science students to the Center and is also starting a 6 inch Newtonian. D.A.S. 'Publicity' trods a meandering trail to find its mark.

A veritable windfall for the D.A.S. in this shortest month of the year ---- another teacher, desirous of enlarging his appreciation of astronomy which he, too, can share with his students is Wilbert Lee Sherrod. In this instance, news of the D.A.S. traveled via a Teachers' Workshop where Mr. Sherrod met and chatted with Dr. Blass,

Richard Emory Walton is an enthusiast in the UFO field. He saw the D.A.S. listing in Sky & Telescope, requested information from Doc Marshall and has now joined the Junior ranks.

Richard, a 10th grade student, does most of his observing with his Oak Park school 3 inch refractor.

WELCOME ONE AND ALL

SOLAR ACTIVITIES

by Charles Morris

All during the month bad weather made observing almost impossible, January 30 was one of the few exceptions. On this day the most beautiful sunspot groups I have ever seen was in view, It contained 41 spots. The second largest group that day trailed the biggest group and contained 9 sunspots including a large round one which proved to be the largest spot that day. There were two other small groups which brought the total to 57.

As the month of February opened, the giant sunspot group was leaving. On the 4th it was on the limb- I was still able to make out 15 spots. On the 5th this number dropped to 6. On the 22nd, Neil Gravenstreter sighted this group again on the east limb. The two other important groups on the sun on Feb, 4 and 5 were fairly large groups. The one that trailed the giant group maintained its 9 sunspots on both days. The other group which was to the south of it had grown from 2 spots on the 30th to 10 on the

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APRIL 21 - SUNDAY MEETING AT U of D

The April Sunday Meeting of the Detroit Astronomical Society will be held on the third Sunday of the month (April 21) instead of the second Sunday, which is Easter. See you at U of D April 21 at 3:15 p.m.

OBSERVER HANDBOOKS

There are still some Handbooks available -and they are of valuable assistance to observers and there are also some

MESSIER CATALOGS

available - get either or both of these items at the Workshop or at the General Meeting.

One of the D.A.S. enthusiastic observers, Chris Edsall (received his Astronomical League

Certificate at the February General Meeting), wishes to share his observing 'fun' with a constructive program for:

JUNIOR OBSERVING PROJECT

A program was incorporated in the fall of 1965 by Mr. Charles Ricker of Marquette, Michigan. Mr. Ricker is a Lunar Recorder for the Association of Lunar and Planetary Observers (ALPO). The program was started to try to find changes in the appearance of the craters on the moon, Termed Lunar Transient Phenomena.

In practically every issue of the ALPO's journal *The Strolling Astronomer*, Mr. Ricker is 'on his knees' to ask people to observe and send in reports. As of last June there were only 15 people in the entire nation working on the project.

So, I thought we might help him out by submitting observations, and at the same time be working on our D.A.S. Observing Program.

The method used is, (using practically any sized telescope) to observe specified craters suspected of change and to make drawings of them on outlined forms supplied by Mr. Ricker,

I will try to have these forms by March 15 at the Sylvia Allen Center, where you can pick them up. PLEASE do not take one unless you know you will use it because there will be a limited supply.

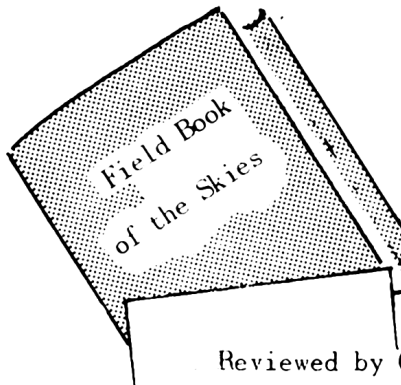
There will be an instruction class on How To Make Lunar Drawings and How To Use Lunar Forms for all participants in this project. The class will be in two sessions, held at The Allen Center March 15 and March 22.

If you have any inquiries, see me Friday nights at the Sylvia Allen Center.

Chris Edsall

The BOOK CORNER

If you know of a particularly good book you think should be included, call Doc Marshall at 393-6631 days or 535-7117 evenings.



Reviewed by C. D. 'Doc' Marshall

Field Book of the Skies by Alcott and Putnam is THE book for the observer, whether a beginner, moderately knowledgeable or skilled,

The first chapters, about 80 pages, are devoted to brief but interesting answers to the questions - Why Study Astronomy? For The Beginner? How Do We Know? How To Use This Book?

Nearly 200 pages at the end include tables of various phenomena and astronomical data as well as chapters on the solar system, sun, moon, planets, comets, etc., etc.

The center section is a veritable treasure-house of exceedingly useful and practical information about the stars, clusters, nebulae and galaxies.

The constellations are grouped by season. Then - each one is discussed separately. The pattern of discussion of each is as follows:

The Latin name and translation Its location in the sky

A brief outline of the mythology of the asterism

A drawing and description of what can be seen by the naked eye and field glass

A drawing and description of what can be seen in the telescope

Double and multiple stars, clusters and nebulae are described in detail and their locations given, The magnitudes, distances, angle degrees and component colors for the double and multiple star systems are tabulated on each page.

This book is really a 'field' book containing enough information in easy form to keep even an avid observer busy for a couple of lifetimes

SEVENTH ANNUAL D.A.S. BANQUET

The Society's 7th Annual Banquet will be held as described below for members, spouses and friends.

When? Saturday, April 27, 1968 at 7:00 p.m.

Where? Pompeian Room - Whittier Hotel - foot of Burns Drive.

How Much? Only \$5.00 per person (children under 12 - \$4.25)

Why? To have a good time, chat with your fellow members, enjoy a magnificent meal and see some outstanding entertainment.

MENU

Fresh Fruit Cup - Assorted Relishes
Entree - Vegetable - Salad
Rolls - Dessert

Where else can you get all this for only \$5.00 (which includes tax and tip).

RESERVATIONS ARE A MUST

RETURN YOUR CHECK AND THE SLIP BELOW BEFORE APRIL 21

Pick your favorite entree:

No. Dinners (children under 12)	No. Dinners Adult	Entree
_____	_____	Roast Round of Beef
_____	_____	Roast Turkey
_____	_____	Broiled Swordfish
_____	_____	Vegetarian Dinner

Name _____

Address _____ Phone _____

Please mail with your check to:

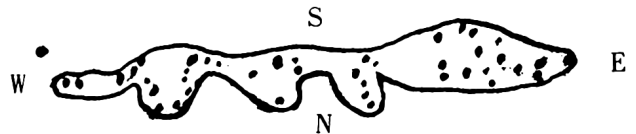
C. D. Marshall, 17396 Westmoreland, Detroit, Mich 48219
Any questions? Call Marshall 535-7117 evenings or 393-6631 days

Please list first and last names of everyone in your party:

SOLAR SECTION

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4th and increased to 13 on the 5th. The total number of sunspots for the 4th and 5th were 36 and 28 respectively. The only other groups that I saw were on February 11 and 12. On those two days there was a C shaped group and a single spot. Recording was impossible because of the wind.



The only major group of the month is shown here. Because of bad weather the only day this remarkable group was visible was January 30. The total number of sunspots was 57 divided into 4 groups.

Eclipse Report



"Vi" Love

'The Unscientific Side of the South American Eclipse'

Chapter VIII - MACHU PICCHU (cont.)

by V. E. 'V' Love

Four of us myself included) admitted to varying degrees of acrophobia and began the 2000 ft. journey upward with some attempt at bravado. It would be very easy, after all these months, to dismiss the trip as just another bus ride. But after about the fourth switchback, even the stalwart were impressed. The stony road was a little better than one car wide with a few trees and shrubs along the open side. As we slowly progressed from ledge to ledge, many of us were silently tortured by 'what-ifs' - - what if it rained and the road became slippery, what if there was a blow-out, what if the bus couldn't maintain its equilibrium on the tight curves, what if the brakes failed on the return trip, ad infinitum. The road finally ended on a very wide shelf where the government had built a hotel.

This was a small Turista with only 17 rooms, a large dining room and a large lounge with a beautiful mural on one wall depicting Inca life. Along the front of the inn was a wide veranda overlooking the Urubamba Valley. Across the road, on the edge, was an observation platform for viewing and picture taking. Looking down, the road we had just ascended seemed non-existent, blending into the side of the mountain. The view was incredible. The R.R. tracks were mere threads beside a ribbon of turbulent muddy water at the base of sheer canyon walls. Our train could only be recognized by means of binoculars. Downstream the river seemed to end in the walls of the gorge, but in reality it makes a horseshoe bend, so that Machu Picchu virtually has the river on three sides. We were surrounded by forbidding, jagged peaks interspersed with deep canyons.

After being assigned to our rooms, we were taken immediately for a walk through the ruins. Like most guided tours, the group was too large and time too

short. To make matters worse, we had our first rain, just a shower but we were well dampened. Our travel agent had warned us that brief showers of varying intensity occurred promptly at noon, but who could believe such a precise weather forecast? The ruins cannot be seen from the Turista. We walked along a narrow path to an entrance gate and thence to the first group of buildings. This was a small sector jutting out into the valley and contained an observation post for viewing the section of canyon where the train had deposited us. From there we walked along a terrace to the main 'city'. Here, for the first time, we were able to obtain an over-all view of this unbelievable stronghold. Our guided tour left a lot to be desired. In two hours we covered the high points and acquired a general idea of the plan of this lost city which covers about two sq. mi. on a saddle between two mountain peaks - Machu Picchu (10,300 ft.) and Huayna Picchu (9,060 ft.). Anyone visiting Machu Picchu should arrange to stay at least overnight, longer if possible, in order to explore each section more leisurely.

Upon our return, we had lunch and then said goodbye to Jean Fox who was leaving our group to return to Lima. Ruth and Frank Sutter, Ed Denslow and Richard Lloyd had missed the morning tour because we had received no definite instructions, so they toured the ruins in the afternoon. Lee and Harvey Johnson and Newell Saigeon hiked up the old Inca road toward the 'gate' which was barely discernible from the inn. The road was a ledge about four feet wide at the start, but gradually diminishing, finally blocked by a landslide. This did not deter Harvey from continuing his explorations.

After dinner, the fellows decided to try again for a glimpse of the Magellanic Clouds and the Southern Cross. Since the electricity was shut off at 11:00 p.m. and the door locked at that time, they made special arrangements with the manager so they wouldn't be mistaken for burglars when they returned. Away they tramped into the pitch-black darkness without a guide and only a small flashlight to show the way over the narrow paths and up the worn stone steps to the first high level of the ruins. Unfortunately, the sky remained overcast, so that only an occasional star could be seen. Disgustedly they returned before 'lights out' and went to bed.

Wednesday, November 16, 1966

Richard Lloyd, Ed Denslow, Harvey Johnson, Joe Shires and Frank Lipke rose at 5:00 a.m. to scale

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1966 Eclipse Report

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Huayna Picchu (9060 ft.) in order to get an over-all view of the 'lost city'. They were accompanied by a guide who led them along the precipitous trail that zigzagged up the side of the mountain, Near the end of their climb, when the path was becoming quite steep, they found a flight of stone steps that helped them 'reach the top, There was scarcely room for all of them to stand on top at the same time, They managed to get some superb pictures of the ruins. Edgar accompanied them a short way, but remained at the

Sundial, the highest point in the city (to be discussed in next installment). Since he is avidly interested in Solar photography, he was most anxious to observe the effect of the rising sun on this ancient stone instrument. Unfortunately there was no shadow because of overcast. He did not consider his efforts a total loss because he was able to take pictures of the sun shining on snow-capped peaks miles to the west.

Next Month: History and Description of
Machu Picchu

The Detroit Astronomical Society
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