

9900 EAST JEFFERSON

DETROIT, MICHIGAN 48214

"Why Explore Space?" Movie at May 21 meeting

Again this year the May Meeting will be held on the third Sunday of the month so as not to conflict with Mother's Day which falls on the second Sunday. The meeting will feature a motion picture "Why Explore Space", also a short talk by "Dick" Lloyd whose subject will be "The Astronomers Baily" - plus directions for finding the minor planet Vesta which will be passing close to the Earth that week-end.

How BIG? how LITTLE?

Those who attended the April meeting at U. of D. were treated to a real thought-provoking talk by "Doc" Marshall. He started into his subject "The Size of Things" by comparing various methods of referring to "quantities" among primitive tribes and the growth of complexity of the arithmetical systems as civilization progressed. He then pointed out how in our counting system we are apt to fall under the spell of the zero until we lose all sense of proportion and size in the physical world around us.

After explaining the dangers of this number trap by a series of analogies, he skillfully led us out of it and inside the atom ... from there out to the solar system .. then to the galaxies. When he had finished, you had, for the first time, a feeling for some true proportions of our Universe.

Regional Convention

A few months ago D.A.S. members were alerted that two Conventions were coming up worth working into their summer activities.

We've printed registration and activities Info on the Astra League Convention at Georgetown University in Washington, D.C., but nary a statistical word on the Great Lakes Regional Convention.

So, get your calendar and red pencil for the GOOD NEWS from the Indiana Astronomical Soc., hosts to the 1967 Great Lakes Regional Convention.

continued on page 2

Say It Again

This issue's masthead is wearing Vol. 4, No. 1. Leigh LaChapelle got this "ball" rolling three years ago. We thought it apropos to reprint the article by Dr. Blass which appeared in your first D.A.S. Newsletter:

From the President

It is our sincere hope that this new publication will make a great contribution to the development of our Detroit Astronomical Society by establishing a firm bond among the different groups of interest and among the many committees laboring in many fields of endeavor. We feel that it is of vital importance that each individual member of the society be well informed on achievements as well as on problems that need to be solved. Why? Because we are convinced that, once a problem is recognized, formulated, and brought to the attention of all, there will always be resourceful members able to find the solution.

We also hope to call the attention of teachers and other interested members of the community to our work. By publishing a few facts and thoughts on Astronomy, we intend to stimulate and maintain interest in our field.

If all our hopes are realized, this little publication will become a well functioning channel of invigorating influences; it will make an essential contribution toward the strengthening and growth of our society. Our best wishes go with it.

Science Fair Winners

The 10th Metropolitan Detroit Science Fair, sponsored annually by the Engineering Society of Detroit and The Detroit News, was held at Cobo Hall April 15 through April 18.

Three D.A.S. Juniors participated in this Fair and we wish to cheer these shining examples on their way. Roger Gall tried his wings with an elegant display on telescope making. Gerald Gainor's entry was an experiment in holography, & Gerald Persha entered an off-axis telescope.

Special congratulations to Gerald Gainor who

continued on page 3

May Program of Events at Sylvia Allen Center

FRIDAY, MAY 5, 1967

- 8:15 p.m. - Beginner's Class
"OBSERVING VESTA"
This minor planet can be found with binoculars during May. Directions for locating it
- 9:00 p.m. - Junior Award Class (Fourth Session) Constructing a 25 mm ocular

FRIDAY, MAY 2, 1967

- 8:15 p.m. - Beginner's Class
"STARS and the MAP MAKER"
The problems of laying out directions in straight lines on the surface of a sphere. How the early astronomers made possible the mapping of the world
- 9:00 p.m. - Junior Award Class (Fourth Session) (Repeat of May 5 class)

FRIDAY, MAY 19, 1967

- 8:15 p.m. - Beginner's Class
"HOW to PREPARE AND PRESENT a PAPER at an ASTRONOMICAL CONVENTION"
- 9:00 p.m. - Junior Award Class (Fifth Session) "Plotting the path of Mars and the Lunar terminator"



Sunday, MAY 21, 1967 -Monthly Meeting at U. of D. (See Article on page one)

FRIDAY, MAY 26, 1967

- 8:15 p.m. - Astrophotography "PRINTING THE POSITIVE"
Motion Picture and Demonstration of principles and Darkroom Techniques
- 9:00 p.m. - Junior Award Class (Fifth Session) (Repeat of May 19 class)

FRIDAY, JUNE 2, 1967

- 8:15 p.m. - Beginner's Class
"DETERMINING STELLAR DISTANCES and the ABERRATION OF STARLIGHT" 9:00 p.m. - Junior Award Class (Sixth Session)

FRIDAY, JUNE 9, 1967

- 8:15 p.m. - Beginner's Class
"ARE WE ALONE"
Probabilities of intelligent life in the Universe
- 9.00 p.m. - Junior Award Class (Sixth Session) (Repeat of June 2 class)

REGIONAL CONVENTION .. cont.

Date: Friday, Saturday, Sunday - August 4, 5 & 6. Place: Campus of Indiana Central College (in Indianapolis)

Fees: \$2.00 per person, \$3.00 per family for advance registration; or, \$2.50 and \$3.50 respectively at the door.

Mail to: Mr. Clyde Fishburn, 2304 Morris Road, Indianapolis, Indiana 46217.

Dormitory Housing: Indiana Central at \$2.50 per person per night. Reservations should reach Mr. Fishburn NOT LATER THAN JULY 10.

Primitive Camping: Space furnished without charge. Commercial Camping: Sites are available.

Maps: Locations of Camp Sites will be sent to those who register.

Program: Observing at Ind. Central's 811 refractor; Business Meeting; Talks & Papers; Exhibits; Judging and Awards in telescope competition; Trip to Indiana University's Goethe Link Observatory; etc.

Exhibits }
Papers } Send information on these items to:
Telescopes } Mr. Lurcott, 1329 Roseway Drive,
Indianapolis, Indiana 46219.

Tentative plans include a tour of points of interest around Indianapolis for those family members who are NOT dedicated amateur astronomers.

Bald Mountain Report

The weather refused to cooperate for our first star show of the year. Late afternoon of Saturday, April 8, found a heavy overcast covering the sky. However, almost 50 optimists made the journey to the Bald Mt. Area. They were rewarded by a few holes in the clouds through which a satellite shadow could be seen crossing the disk of Jupiter. Seen through Nelson Lewis' 10" teleschmidt it was a beautiful sight. Many of the new members who had never attended one of these functions had a chance to compare different types of instruments including a "Questar", manned by Fr. Morel.

The only pessimists in evidence were the show committee, who didn't know whether to show up because of the gloomy skies. By the time they did arrive and prepared the coffee several of our guests (including Mr. & Mrs. Alyea and Mr. & Mrs. Robinson of the Warren Astronomical Society) had left. If you were one of those who attended and didn't get your refreshments, please see Ray Rea any Friday at the Allen Center. He will be delighted to treat you to coffee and donuts.

SCIENCE FAIR ...cont.

not only won First Place (Physics) but was also named as one of the two Grand Award Winners. Award Winners represent Detroit at the International Science Fair in San Francisco this month.

Second Place (Physics) was won by Gerald Persha ...Congratulations. The off-axis telescope Gerald Persha built was based on the designs of Anton Kutter (W. Germany), inventor of this 'scope. The basic, optical layout is of the Cassegrainian, with the exception that the secondary is positioned outside the path of incoming light. This modification increases the light gathering capability of the 4" primary and eliminates the image distortion due to the diffraction of light around the secondary mirror. He first learned of the off-axis when he happened on an article by Mr. Kutter in the Dec. 1958 S & T, describing his 12" off-axis scope' & referring to a publication (Bulletin A, Sky Pub. Corp.), where the technical details of the 'scope are related.

The basic principle of the off-axis 'scope is that the image defects (mainly coma and astigmatism) produced by the primary's inclination are corrected by the secondary, which is inclined in reference to the reflected cone of light from the primary to produce image errors of equal value, but opposite in sign, hence, they cancel each other out.

Gerald Persha plans to continue his study of astronomy at Case Institute of Technology this fall, His dream of a ten-inch off-axis will be postponed 'til that day he will have more time and money. In the meantime, his 4"off-axis and recently completed Foucault tester will be exhibited at this year's Regional Convention at Indianapolis,

We found some pertinent facts about Gerald Gainor's experiment in The Detroit News which we feel are worth re-reading (excerpts from the article by Harry Salsinger).

A 10th grade student, Gerald, just turned 16,

amazed judges with his "profound knowledge" of holography, a relatively new area in ultrashort-wave research. He became involved in science at the age of nine when he built his first telescope and got interested in light waves as a member of the Detroit Astronomical Society.

He built his first ruby laser three years ago and won a 2nd prize in the 8th grade competition in the Science Fair. For his new exhibit, which combines his ruby laser, somewhat modified, and a helium-neon laser, Gerald said he had to spend a few hundred hours "reading everything I could find on lasers."

A holograph is a three-dimensional picture produced with two laser beams. The judges called his experiment "an astounding accomplishment in a field that is so little explored".

Gerald hopes to attend Wayne State, University of Michigan or Stanford and pursue a career in physics or a related area,

Again, Congratulations, boys.

The Great Lakes Star

On Friday, April 21, Ray Rea delivered 50 copies of the Great Lakes "Star" to our Allen Center headquarters, The Star is the official publication of the Great Lakes Region of the Astronomical League, This is the first issue this year and has 16 pages of news about the clubs in the G. L. Region. Due to the poor condition of the Regional Treasury, only a limited number were printed, Since the D.A.S. quota was only 50 copies, a general mailing cannot be made to the membership. While the supply lasts, a copy may be obtained on Friday evenings at the Center, or at the May Meeting at U. of D.

The Editor of the "Star" this year is Gary Ross, who formerly lived in Oak Park and was at one time very active with the D.A.S. Junior Group



After 35 Years

*editor's note: Last month we promised Something Special for this issue. Well, here it is. The result of a three year search to find the beginning point of our Astronomical Society.

In mid-December of 1932, The Detroit News printed an article which took up less than four inches of space. Under the headline "Amateurs Organize Astronomical Club" was the story of the

forming of a club consisting of 13 members at a meeting held at the home of Harry L. Armiger on Epworth Blvd. among the group were several amateur telescope builders and lens grinders who found pleasure and knowledge in star gazing. It

was stated that the object of the organization was to promote interest in, and unite those who are concerned with amateur astronomy and telescope building. The second meeting was scheduled for January 8 at the home of George O. Hartness on Algonquin Ave.

Last month, at the Banquet at the Pontchartrain Hotel, past D.A.S. president Dick Lloyd had the privilege of introducing to the members gathered there First D. A. S. President Harry Armiger and his wife, Lee.

President Blass stated that he was honored to present Mr. Armiger with an Honorary Membership in the Organization which he had founded 35 Years Ago.

Three years ago Dick Lloyd started on a project aimed at tracing the history of the D.A.S. back to its original root. Old records had been lost, or never existed. With the help of past-president Charles Johnson, continuity of presidents was traced back to 1936 but there the trail became hazy. There were indications that the club went back to an earlier beginning and so the search went on. Lloyd proceeded on the theory that for any undertaking there is generally one person who acts as the spark-plug, and if that person or his family could be located, then the early history of the D.A.S. would be fairly easy to trace. We now know that Harry Armiger is that person. Ironically, Dick never did locate him...his wife, Linda, did-and without even trying. She met Mr. Armiger at a Mineralogical Show while Dick was Eclipse chasing in Peru last November.

Now, fortunately, we have a veritable fountain head of information about the "early days" which we know will make exciting reading in future issues. Watch for these articles.

Harry and Lee, we' re all so glad you' re back.

We wish to welcome . . .

... the four members APRIL showered upon the D. A.S.. but there are seven names. New Math? Not a bit. We just plain missed simple addition back in February.

If Stephen Bobbio had been as lax as our welcoming committee, we would have found the door locked at the Dec. Sunday Meeting at U. of D. Mr. Bobbio is a Teaching Fellow (Physics); heard about the D.A.S. in Dr. Blass' Astrophysics Class; and, played host to the D.A.S. at the General Meeting when Dr. Blass was out of the city.

David Florkowski heard about the D.A.S. from member Ray Rea. David has been interested in variable star observations as well as observing in general, and a visitor at the Sunday Meetings before becoming a member.

William J. Kirby is a teacher who discovered the D.A.S. through a newspaper article. We look forward to seeing Mr. Kirby more frequently at the Friday Workshop,

Our apologies, gentlemen. The red shift is our face but the warmth is glowing in our welcome.

Elaine M. Berg is a 7th grade student at the Norup Jr. High in Oak Park. Elaine's eagerness to make a telescope seems to increase with every trip around the barrel. There may be a new 4 1/4" Newtonian finished 'ere this Newsletter is mailed.

John Hayes and Samuel Stanley, 8th grade students at Pierce Jr. Hi, were among the boys who accompanied Science teacher Larry Lindeman to Open House April 14. Samuel has a 40mm 'scope but both boys are working on an 8" reflector. We expect a couple more Junior Awards in Astronomy to be acquired here.

We've been saying "Hello" in alphabetical order, yet Harry_Armiger's name is not at the top of April's list (see article above).

Welcome every and each one of you.

Stormy Weather

We appreciate the fortitude of those teachers who braved tornado warnings to attend the Center April 14. Also, a vote of thanks to our optimistic members who set up their 'scopes in the park at the rear of our building to try and provide a glimpse of Jupiter and Mars through occasional open spots

continued on pg. 5

Eclipse Report



"Vi" Love

Vi's first Chapter - Planning the Itinerary- of her article "The Unscientific Side of the South American Eclipse" ended with the 20th Century Musketeers, Lipke - Shires - Lloyd, defying the laws of gravity and ticket agents, waving goodbye to Miami shores, winging their way to Lima with intent to fulfill their duties of "advance guard". This installment is a flashback to Detroit, to the main body of the Eclipse group:

Chapter II - The Expedition Is On Its Way

by V. E. "Vi" Love

On Friday, Nov. 4, 1966 at 9:00 p.m., eleven of the group met at Metropolitan Airport with Mr. Bowser. We were given tags, passport cases, baggage tickets, plane tickets, motel & hotel vouchers. Mr. B. gave us clear instructions to go to the APSA counter when we landed in Miami and some one would take charge and assist us to the motel. We left Detroit at 10:00 p.m. by Delta jet and landed in Miami at 12:30 a.m. Leaving at once for the APSA counter, we all tramped the full length of the terminal - seemed like a good half mile. The APSA counter was closed. There was nothing to do but to walk all the way back and claim our luggage. Dick showed the porters our transportation and motel vouchers. They seemed to know what to do - piled us into cabs with our baggage and away we went. The motel - The Crossways - was just outside the airport. It should have been called the "Runway". Our room over-looked a bowling alley parking lot which remained brilliantly illuminated all night. Between the planes and the lights, we slept very little.

The next morning five more of our party joined us. The Sutters had driven to Florida from Ohio. Tom Waineo came in from Mass., Ed Denslow from St. Pete. Saturday, we embarked for S.A. via APSA Jet. It was a beautiful sunny day. Through the clouds we could see the Caribbean far below then Cuba and after a few hours, the coast of South America. Our first stop was Bogota, Columbia at 5:15 for refueling, Most of the passengers went into the terminal which was quite modern but not too well lit. There was a free coffee bar and a few Souvenir shops and many very small, dirty children

begging for "American money ". In a half hour we were permitted to board our plane again, each of us receiving a package of Columbian coffee as a parting gift.

Our plane landed in Lima at 8:45 p.m. and we were greeted by our advance trio and representative of AI I transport travel agency. Our baggage was collected for us but we did not go through customs. The airport was beautiful and new. There was evidence of some damage by the recent earthquakes- cracks in ceilings and walls, and new expanses of window glass. Outside the main entrance was a huge fountain. In less than half an hour, we were in the city where the group split up. Three couples (Loves, Saigeons, Sutters) went to the Hotel Bolivar, the rest to the Hotel Alcazar.

The Bolivar is on San Martin Plaza, the transportation hub of Lima. Just as in Detroit, at 6 o'clock there were long lines of people waiting for busses for Callao and the Southern suburbs. The most outstanding feature of our hotel was a large circular lounge known as the Rotunda. It was in the center of the first floor and had a domed ceiling of leaded glass supported by pillars. This was a popular meeting place for Limans and tourists especially for lunch, tea or cocktails.

Dick Lloyd came about 11:00 p.m. to discuss the non-arrival of the equipment. Betty Saigeon and I went out to find a restaurant to get a cup of coffee but finally gave up. We went to bed about 1:00 a.m., but the traffic noise was so great we couldn't sleep. In the first place, five streets enter the Plaza at the side where the Bolivar is located; secondly, the primary requisites for driving seemed to be the ability to blow the horn and bluff your "opponent", Then, too, this was the week before elections for mayor. The two major parties were No. 2 and No. 4 on the ballot, so hornblowers continually publicized their parties by either 2 or 4 blasts on their horns. By 3:00 a.m., sleepless Dick had enough and was on the point of calling the airport for a flight back to Miami. He finally dropped off, but we had to get up at 7 in order to be ready for an all day trip into the Andes.

to be continued

OPEN HOUSE FOR SCIENCE TEACHERS

cont.

in the storm clouds, and barely escaped drowning in the downpour that visited us later in the evening.

Another visitor, Larry Lindeman, Science teacher from Pierce Jr. High, brought, as a most welcome surprise, the school's livewire science club, along with their telescopes.

We also wish to extend a thank you to Edmund Scientific Co. for sending material to assist us.

The 6TH Annual Banquet

Excellent cuisine, exceptional view, perfect company and a program that ran the gamut of emotions ... that was the D.A.S. Sixth Annual Banquet.

The first two items are available to anyone visiting the Hotel Pontchartrain, but to duplicate the company, you'll just have to put your reservations in for the 7th Annual Banquet.

Joining in with the D . A. S. members were Mr. Richard Fanning, Assistant Director of Parks & Recreation, and his wife; Ed Keith, Past President of the Royal Astronomical Society of Canada, and his wife and guests, Mr. & Mrs. Mervin Tofflemire (also of Windsor); Great Lakes Regional Representative Frank Sutter and his wife (she is now an avid Solar Eclipse chaser); Ken Stecker, Eclipse "ham "operator, and his wife; and, Harry Armiger, D.A.S. founder, and his wife (article on page 4).

A "program ?" started before dinner was served.

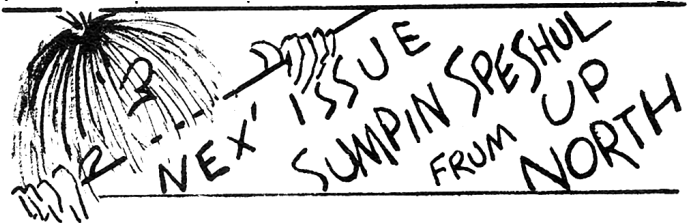
Doc Marshall had specified reservations for 72 plus... and 72 arrived. The D.A.S. was told there would be 8 places per table so thus it was planned with numbered tickets, et al... the tragicomedy began when it was found there were two tables set for 10 and six tables set for 8.

Frank and Ruth Sutter, who had driven up from Dayton, Ohio, were two of the four left standing. Ruth optimistically said that waiting gave them a good opportunity to look at nighttime Detroit twinkling 25 floors below. Detroit twinkled for 40 minutes before the table was ready.

The real Program after Dinner proved that Mr. Wilson's Harmonica Bernd boys were good story-tellers as well as talented musicians. Speeches were interesting and brief. Doc Marshall, our M. C., had some surprises up his sleeve. He proved it by speaking "off the cuff"... said cuff being gently pulled out of his coat sleeve for about a foot as he referred to notes written upon it.

He requested Leigh LaChapelle to read a letter received by Dick Love concerning the 1970 Eclipse. A copy of Dick Love's reply was read ---- Mr, Love CANNOT change the time, location or path of the 1970 Solar Eclipse to accommodate those who find it difficult to travel to Mexico or Florida.

Only seasoned "Chef" Marshall could cook up the correct mixture of "ridiculous and sublime" to serve up a banquet such as this. Thanks, Doc.



The Detroit Astronomical Society
9900 East Jefferson
Detroit, Michigan 48214

Non-Profit Org.
U.S. Postage
PAID
Detroit, Michigan
Permit No. 3108