Autumn's Jewels

The Double Cluster, an open cluster in the constellation Perseus, is a beautiful object for amateur telescopes.

This photograph taken from Stargate Observatory was shot with a 3" f4 telescope, guided with the 12½" Cassegrain.

Exposure time: 20 minutes
Weekend Astronomical Society Paper

EDITOR: Send all articles to-
Judy Butcher
45200 Keding Apt. 102
Utica, MI 48087
(313) 254-1786

The W.A.S.P. is the official publication of the Warren Astronomical Society and is available free to all club members. Requests by other clubs to receive the W.A.S.P. and all other correspondence should be addressed to the editor at the above address. Articles should be submitted at least one week prior to the general meeting.

W.A.S.

Warren Astronomical Society
P.O. Box 474
East Detroit, MI 48021

President: Doug Bock 333-0898
1st V.P.: Frank McCullough 759-5215
2nd V.P.: Ron Vogt 545-7509
Secretary: Ken Kelly 839-7250
Treasurer: John Wetzel 882-6816

The Warren Astronomical Society is a local, non-profit organization of amateur astronomers. The Society holds meetings on the first and third Thursdays of each month. The two meeting locations are listed below:

1st Thursday – Cranbrook Institute of Science
500 Lone Pine Road
Bloomfield Hills, MI

3rd Thursday – Macomb County Community College – South Campus
B Building (b209)
14500 Twelve Mile Rd.
Warren, MI

Membership is open to those interested in astronomy and its related fields. Dues are as follows and include a year's subscription to Sky and Telescope.

Student .................... $18.00
College ..................... $22.00
Individual .................... $27.00
Family ....................... $32.00

Stargate

Observatory Chairman: Ron Vogt 545-7309

Stargate Observatory is owned and operated by the Warren Astronomical Society in conjunction with Rotary International. Located on the grounds of Camp Rotary, Stargate features a 12½” club-built Cassegrainian telescope under an aluminum dome. The observatory is open to all club members in accordance with the “Stargate Observatory Code of Conduct.”

Lectures are given at Stargate Observatory each weekend. The lecture will be either Friday or Saturday night, depending on the weather and the lecturer's personal schedule. If you cannot lecture on your scheduled weekend, please call the Chairman as early as possible or contact an alternative lecturer. Those wishing to use Stargate must call by 7:00 p.m. on the evening of the observing session. The lecturers for the coming month are:

Nov 5/6 .......... Ken Strom ......................... 977-9489
Nov 12/13 .... John Root .......................... 464-7908
Nov 19/20 .... Lou Paix ............................ 781-3338
Nov 26/27 .... Dave Harrington ................... 879-6766

Dec 3/4 ...... Frank McCullough ............... 254-1786
Dec 10/21 ... Ron Vogt ............................ 545-7309
Dec 17/18 ... Alan Rothenberg ................... 355-5844
Letter from the President

I would like to announce that a special election will be held at the November general meeting at Macomb County Community College - South Campus. The date is November 18, 1982. You will be electing your officers for the coming year starting on January 1, 1983. These officers will also be your Board of Directors. So please be there and make your vote count.

I would also like to thank the officers and committee members that have served under me for the last two years. For the fine work they have done. Together we have accomplished many things, such as the revitalization of the workshop or sub-groups, we hosted a Regional Convention. we achieved our Incorporation status and have plans in place for expansion of the Observatory. In the years to come I would hope that this organization will flourish and achieve standards and goals that have only been discussed to date. I will not be running for office this term for personal reasons. I will, however, contribute to the organization as a regular member. I will also be able to help out on a committee if so desired by the new administration.

We have a fine organization here and I would hope that each member will continue to contribute their enthusiasm and efforts towards the goals of this organization. Please remember that this is YOUR club and it will be whatever you wish it to be as long as you work together.

Thank you for giving me the opportunity to serve you.

Douglas H. Bock
President (W.A.S., INC.)
533-0898

10/21/82
6 INCH MIRROR GRINDING KIT. CONTAINS MIRROR BLANK, TOOL, MAT, PITCH, ROUGE, POWDER #80, 120, 220, 320, 400, 600, 900, CERIUM OXIDE, $30.00

10 INCH MIRROR GRINDING KIT. CONTAINS MIRROR BLANK, TOOL, MAT, PITCH, ROUGE, POWDER #120, 220, 320, 400, 600, 850, 2100. ALSO EDMUND SCIENTIFIC FOUCAULT TESTER KIT. $80.00.

ASTRONOMY Magazine, back issues from January 1976 to present, some issues already sold. 75¢ each.

CONTACT: RAYMOND BULLOCK CRANBROOK INSTITUTE OF SCIENCE) 645-3235
In Search of Dark Skies

On September 17, 1982 at about 1:00 pm we left the Detroit-Metro light dome behind us and headed toward upper Michigan near Cadillac. We were on our way to anticipated dark skies. Three cars left from my house containing Roger Tanner and equipment, Ken Kelly and equipment and Marty Kunz, myself and equipment. North of Flint we met Bob Lennox and his equipment to complete the group. From that point on we drove through rain (yuk). I had stuck my neck out at the last meeting and promised one clear night. So far it wasn't looking too good for me. But we would have three nights in which to see clear skies. We arrived in Cadillac about 5:00 and picked up some groceries for the weekend, then on to the property which is nine miles west of Cadillac. Once we arrived there we opened the cabin, unloaded and pitched a tent. It was still raining. By 8:00 we realized tonight was not the night. So we pulled out the cards and played poker until 11:00. We then went outside and notice some holes in the clouds where the milky way popped through like a beacon. Amazement came over everyone's faces, for just a few moments we saw the darkest sky that anyone had seen in several years. The clouds were still dominating so we knew tonight would be just a teaser if we were to set up. We stayed up for several more hours checking the sky every so often. But the clouds were still dominant. We hit the sack about 2:00 AM.

The next morning, we woke to sunshine and cool temperatures. Breakfast was served at about noon and then we took a walk around the property. A few puffy clouds dotted the sky but we weren't worried. Later we went over to the ski lodge and ate some supper and played some pool. The Sun would be going down soon so we headed back to the cabin. After picking up a few things we headed for the observing hill. Ken Kelly set up his 14 inch with the help of a few others. Then we set up the rest of the telescopes. Roger Tanner hadn't returned from Charlevoix yet and the sun was setting. We weren't sure he would make it back tonight. But about 30 minutes after sunset he pulled in and set up his telescope. In the west, we could see the thin crescent of the moon. It was approximately 36 hours old. As twilight receded the brighter stars popped out and everyone lined up their telescopes on the north pole. We walked around and talked for a while waiting for twilight to end. Finally, we realized it had ended because we couldn't see anyone anymore. It was like talking to someone who wasn't there because you could not see them. Looking up and seeing the milky way spread out across the sky from one horizon to the other was nothing less than spectacular. The dust lanes easily seen against the brilliance of the milky way. Into the night we gawked with wonder at the various objects we looked at. Some of us did some astro-photography which a week later turned out to be excellent. We saw meteors and aurora. We had a fire going about 40 feet from the telescopes hidden behind a car so we could
go and warm up. We had a little bit of dewing early in the evening but that stopped at about 11:30. We even used the heat from the fire to get rid of the dew on some of our optics. Into the morning hours we worked. Enjoying every minute. It seemed like just a few hours when morning twilight started. Although we had been out there for about 11 hours. By 5:30 that morning we decided to pack it in and get some sleep. We had just finished photographing Orion. Most were very impressed with the night we had. "Best skies I've ever seen." said Roger Tanner. Bob Lennox and I agreed it was the best skies we had seen in several years.

The next morning or should I say afternoon it was partly cloudy, so it looked like we had our one night that I promised. So we went back to the lodge and watched the Lions game then did some exploring down the fire lanes in the woods. Later on we went back to the cabin and played some cards. After some sleep the next morning we had breakfast in Cadillac and headed for home in the rain. I seemed to remember driving up in the rain also. Hmmm. Well maybe next time you can join us.

Hope you have good skies too,

Doug Bock (533-0898)
WARREN ASTRONOMICAL SOCIETY'S
COMING EVENTS

November 4th  Meeting at Cranbrook Institute of Science.

November 11th  Astrophotography/Cosmology subgroup meeting at Doug Bock's.

November 13th  Deep Sky subgroup meeting at the club's Stargate Observatory in Camp Rotary for a night of observing and discussing constellations and some objects found within them. *If cloudy, group will meet at Frank McCullough's for a planned program.

November 18th  General meeting to be held at Macomb County Community College. Election of officers will take place at this meeting.

December 15th  The Annual Christmas Banquet to be held at Marinellis of Troy. Starting at 7:30 p.m. the banquet takes the place of the general meeting. Make your reservations now for a night you won't forget!
1st  Mercury and Saturn are paired together in the eastern sky this morning just before sunrise. Choose an observing site with a clear horizon and be prepared to look carefully. You won't have very long to observe before the Sun makes the sky too light for good viewing. (Binoculars will help too.) The Moon is Full at 7:57 a.m. EST.

4th  Venus is at superior conjunction. The Moon passes through perigee this morning: 227,090 miles.

8th  The Moon will reach Last Quarter at 1:38 a.m. EST.

13th Jupiter is in conjunction with the Sun. In the morning sky, you can see the Moon passing 3 north of Saturn.

15th  The Moon is New at 10:10 a.m. EST.

16th  The best time to observe the Leonid meteor shower will be late tonight and in the early morning hours of the 17th. Under dark suburban or rural skies, the rate will be around 10 meteors per hour; anyone observing from the city should expect less. Since peak activity comes during the daylight on the 17th, look for the meteors on the night of the 17th/18th as well.

19th  Mercury is at superior conjunction. In the evening sky, the Moon will either occult or pass just south of Mars, depending on where you live. (See Eye on the Sky and Backyard Astronomer, Nov. Astronomy, for details.)

20th  The Moon is at apogee this morning: 251,883 miles.

23rd  First Quarter Moon is at 3:05 p.m. EST.

27th  Uranus is in conjunction with the Sun.

30th  Full Moon is at 7:21 p.m. EST.
Marinelli's
of Troy
4924 Rochester Road
Troy, Michigan 48084
689-6460

Warren Astronomical Society Christmas Banquet

When: Wednesday, December 15th

Time: 7:30 p.m. Arrive, 8:15 p.m. End Cocktails - Begin Dinner

Program: Raffle - Door Prizes - Awards Presentation

Four Star Program

Dinner:

Veal Parm. ($8.50)
Lasagna ($8.50) (Map on Reverse Side)
Perch ($8.50)
Shrimp ($9.50)
Chicken Italiano ($8.50)

Includes:
Soup - Salad
Vegetable - Dessert
Beverage
Complimentary Glass of Wine with Dinner
To Detroit

More Information Please Cable

To L. W. Allworth - 2541786

(Bring a friend)
We see a brilliant flash of light penetrating a thick wall of smoke. We hear the piercing yells and cheers of encouragement from the crowd muffled by the roaring thunder in our ears. The sounds of the crowd are mixed in with the clickety-click of camera shutters and are yet still perceivable over the continuous reverberations of shock waves coming up through the ground. The excitement leaves our knees weak and our adrenalin pumping a thousand times faster than usual. In a matter of minutes there is a puff of smoke some twenty-three miles above the surface of the earth as the solid rocket boosters disengage and tumble down to land in the sea. Staring into the heavens we follow the light that continues upward until it is nothing more than a star. The Shuttle Transport System, better known as "Columbia" is on her way.

Many of us remember the thrill of watching a launch. For myself, seeing a launch for the first time made me more aware of the sophistication of the shuttle herself and made me realize just how advanced the whole space program is, with a vast multitude of plans lying yet in the woodwork. After witnessing such a spectacle, you can imagine my perplexity at finding out about a group of free-thinking people who hold very strange ideas about the universe in which we live. Living today in our space age society this group of individuals believe that the moon landing was a Hollywood studio production, that Einstein's theory on the curvature of space could indicate that NASA's photos are no more than optical illusions, and they still believe in Ptolemy's theory of the earth being at the center of a system of fixed stars. Who are these lunatics you ask? They are known internationally as the Flat Earth Society.

The Flat Earth Society's strongest belief that is that the earth is flat, came from the ideas of the Universal Zetetic Society (zetetic meaning to search and seek out). This society supposedly originated around 1800 and flourished in England during the past century. The society's headquarters is now based in Lancaster, California ironically near Edwards Air Force Base. After speaking to the society's president over the phone I was able to obtain some literature about the group. In the literature it says the aim of the society is "To carefully observe, think freely, rediscover forgotten facts and oppose theoretical dogmatic assumptions. To help establish the United States ...of the World on this flat earth Replace the science religion ...with sanity."
The beliefs that the Flat Earth Society hold, are thought by themselves to be facts not theories. "The Fact the Earth is Flat is not my opinion, it is a Proved Fact. Also demonstrated Sun and Moon are about 3,000 miles away and are both 32 miles across. The Planets are 'tiny'. Sun and Moon do move, earth does NOT move, whirl, spin or gyrate. Australians do not hang by their feet under the world ...this is a FACT, not a theory!"

-Charles K. Johnson, President

Other facts which the society hold true include:
- if the earth were a globe, the Suez Canal would have a center hump 1,666 feet higher than each end and it doesn't.
- the South Pole is actually a circumambient field of ice and the North Pole is at the center of the flat world.
- NASA's photographs, even those taken from Mariner, Viking, & Voyager missions, are fakes or better yet Einstein's theory on the curvature of space could indicate they are nothing more than optical illusions.
- the Space Shuttle is a joke since you can't orbit a flat earth.
- the dome of heaven is about 4,000 miles away, and the stars are about as far as San Francisco is from Boston.
- the moon shines by its own light and isn't eclipsed by the earth eclipses are actually caused by unseen dark objects passing in front of the moon.
- sunrise and sunset are optical illusions

The Flat Earth Society also maintains to take many of their facts of a flat earth from the bible. They believe the earth must be flat for the prophesized condition for a world government to take place as they will quote from Isaiah 60:20 "sun shall go down no more". Jesus ascended up into heaven and not into outer space. And Moses was also a flat-earther.

It’s amazing but very true. The flat-earthers are very sincere when they speak of the earth being flat. As St. Augustine observes in The City of God, "If the thing believed is incredible, it is also incredible that the incredible should have been so believed." The belief that the earth is flat, even if taken literally, is no more incredible than countless other beliefs about the cosmos that at one time or another have been received with respectful attention. If nothing else the Flat Earth Society is committed to the conviction that our senses have been grossly abused and are asking us to be aware and always question the strongest beliefs of our age. Even though we all know the earth is an oblate spheroid it's not a bad bit of advice.

[Signature]