

DETROIT ASTRONOMICAL SOCIETY



NEWSLETTER

April/May 1981

FROM THE PRESIDENT

Since the last newsletter, our club activities have been expanding , Throughout the newsletter you will find the details of all new projects, programs, trips, star shows , speakers , membership expansion and mirror making activities which all have a full head of steam. Highlights of the next few months activities are as follows:

- 1) In April, members of "DAS" and "WAS" are going to Florida to observe the Space Shuttle launch and take a NASA tour of the space center and launch facilities.
- 2) The first annual DAS awards program is scheduled for April 24. There are many awards to be given out for achievements in telescope activities and member participation in the society.
- 3) The "DAS dinner" is scheduled for April 25, 1981. Information about the dinner is in the body of the newsletter.
- 4) The speaker exchange program is underway with a representative from the Warren Astronomical Society to speak at DAS on May 8, 1981 and a representative from the Livonia Astronomical Society to speak at DAS on May 22, 1981
- 5) Our first public star show of the year will be held on May 9, 1981 from 2:00 PM-10:00 PM at the Southfield Library.
- 6) Information sheets are available at our Friday night meetings for the Apollo Rendezvous which will be held in Dayton, Ohio on June 12,13 1981. Please sign-up if you plan to go.
- 7) Plans are being generated for DAS to attend the 1981 Stellafane Convention in Vermont July 31 and August 1. Please sign-up on the Friday night sheet if you plan to go.
- 8) DAS members can obtain free admission to the Wyandotte Planetarium at the Roosevelt High School on 540 Eureka Road, Wyandotte, on Wednesday at 7:30 PM by showing their DAS membership card.
- 9) The college level astronomy course is still open to all DAS members and is proceeding well.
- 10) Many members have submitted articles which will appear in this newsletter, however more membership participation in club activities is needed.

As you see we are off to a good start and I look forward to seeing more member participation in these projects.

-Gary Frey
President

AMATEUR ASTRONOMY LOSES A FRIEND

With the passing of M. Lawrence Applebaum, "Larry", amateur astronomy lost a good friend. Larry who had been an electronics instructor at Cass Technical High School for 31 years was an enthusiastic devotee in several other fields which included music and astronomy.

He joined the Detroit Society in the early 1950's and in 1954 constructed his own eight inch Newtonian telescope. At the same time he devised several items for telescopes which were far superior than the commercial ones available. In 1970 he was co-captain of an eclipse expedition which traveled to Perry Florida in 1973 was captain of a similar expedition which traveled to Prince Edward Island in Eastern Canada. He sponsored a student astronomy club at Cass Tech until his retirement in 1978.

In other fields Larry was an enthusiastic and indefatigable worker. For several years he was either a director or president of the Detroit Chamber Music Society. He also served over a period of 20 years in several offices in the American Radio Relay League and other ham radio organizations. He also found time to serve on the board of directors of the astronomy society since 1961. This service was continuous except for two years when he served as treasurer.

Music, radio, and astronomy organization must search long and hard to find three people to replace our dear friend Larry.

CALENDAR OF COMING EVENTS

- April 3 -Board of Directors Meeting, 7:00PM
-Movie: to be announced, 8:30PM
-Work shop activities
- April 7 -Astronomy class, 7:00-8:30PM
UofD, Engr. Bldg. room #301
Lecture by Dr. Blass
- April 10 -General Meeting, 8:00PM
-Lecture by Richard Lloyd, 8:30PM
"Double Stars and Eclipsing Binaries"
-Workshop Activities
- April 14 -.Astronomy Class
(see april-7)
- April 17 -Workshop Activities
- April 21 -Astronomy Class (see April-7)
- April 24 -Awards Night, 8:30PM
-Workshop Activities
- April 25 -DAS Dinner

- April 28 -Astronomy Class
(see April-7)
- May 1 -Board of Directors Meeting, 7:00PM
-Movie: to be announced, 8:30PM
-Workshop Activities
- May 5 -Astronomy Class (see April-7)
- May 8 -General Meeting, 8:00PM
-Guest Lecture by Lou Faix (WAS) 8:30PM
"Double Stars on a Budget"
-Workshop Activities
- May 9 -Astronomy Day
Star show at Southfield Library 2:00-10:00PM
- May 12 -Astronomy Class
(see April-7)
- May 15 -Workshop Activities
- May 19 -Astronomy Class
(see April-7)
- May 22 -Guest Lecture by Ralph Brown (LAS) 8:30PM
"Open Clusters"
-Workshop Activities
- May 26 -Astronomy Class
(see April-7)
- May 29 -Lecture by Richard Lloyd, 8:30PM
"Variable Stars"

D.A.S. DINNER—SATURDAY APRIL 25, 1981

Come join us for cocktails, dinner and a good old fashioned social night out. Reserve this date for DAS night.

This is the time of the year for the annual. DAS banquet, however this year its going to be different. A shift of emphasis from the usual structured approach to a simple informal gathering.

This year the power goes back to the people. You'll have to come see for yourself to believe it. No speeches by officers, no introductions, anecdotes, special guests or awards. You won't even have to put up with movies, slides or professional entertainment. You can join our dinner party, enjoy an informal come as you are evening with us at a friendly, FAMILIAR Place. Bring the whole family

There will not be any persuasion or incentive to attend so don't expect someone to give you a phone call, this is it: We have about a dozen members who meet here after every Friday night workshop and socialize until they throw us out at 1:00AM, that's all I'm going to offer in the way of testimonials - just let it be known we do enjoy ourselves.

AMATO'S Italian Restaurant, 6926 Wyoming-Dearborn
Located on the east side of Wyoming, one block south of Warren Ave.
....Saturday....April 25, 1981
....7:00PM Cocktails....Cash Bar
....8 :00PM Dinner -

In order to simplify this affair w. are restricting ourselves to the following items from the standard menu.

1. Broiled Pickerel \$9.50 *
2. Broiled Lobster tail \$10.75 *
3. Broiled New York Sirloin or T-Bone Steak \$14.25 **
4. Veal Ala Parmigiana \$13.00 **
5. Sliced Tenderloin of Beef \$13.00 **
6. Baked Lasagna Imbottite \$8.75 ***

* Include salad bar, cup of onion soup, spaghetti or potato, homemade bread, garlic bread, and coffee.

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Pizza available

....all prices include tax and gratuity....

....please - no substitutions....

....pay at the dinner....

I must have your reservation and food selection no later than April 14th

....Please don't wait until the dead line.

Thanks!
Ed Dvorak
538-0328

OBSERVERS REVIEW

April Sat 4) New Moon 3:19PM EST
Sat 11) first qtr. Moon 6:11AM EST
Fri 10) (tentative) first Space Shuttle test flight from Cape Canaveral (see Feb.-March newsletter March 17).
Wed 15) NOAA8 is due for launch by an Atlas F.
Sun 19) Full Moon 2 :59AM EST
Wed 22) Lyrid Meteor Shower 10-15 per hour
Thu 23) Satellite Business Systems' second commercial communications satellite is due for launch by a Delta from Cape Canaveral.
Sun 26) 2:00AM EST becomes 3:00AM EDT
Mon 27) Last quarter Moon 6:14AM EDT

May Mercury may be seen just after sunset after about May 10, below
 Castor and Pollux low in the west.
 Venus can be seen with difficulty by the end of the month below
 Mercury low in the west.
 Jupiter and Saturn both set after midnight this month.
 Fri 1 & Sat 2) Point Pelee Observing session
 Sun 3) New Moon 12:19P.M EDT
 Mon 4) Aquarid Meteor Shower peak (April 21-May 12)
 Sun 10) first qtr. Moon 6:22PM EDT
 Mon 18) Full Moon 8:04PM EDT
 Sat 23 - Mon 25) (tentative) Warren Astronomy Soc. camp out at
 Camp Rotary - DAS members and families invited
 Tue 26) Last qtr. Moon 5:00PM EDT
 Fri 29 & Sat 30) Point Pelee observing session
 June Sat 6) (tentative) DAS star party—details in June-July newslet-
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-Nancy Waggoner-

PLANETS OF 1981

- Saturn - In morning skies until March 26; from March 26 on it be in evening
 skies until October 15; then on it will be in morning skies for rest
 of 1981, and will be in constellation Virgo.
- Jupiter - In morning skies until March 26; from March 26 on it will be in
 evening skies until October 13; then it will be in morning skies
 for rest of 81, it will be in the constellation Virgo for all of
 81.
- Venus - In morning skies until April 7; it will be in evening skies for
 rest of 81. During Feb. it will be in Capricornus, March in Aquari-
 us, April in Pisces, May in Taurus, June in Gemini, July in Leo,
 August and September in Virgo, October in Scorpius, December in
 Capricornus.
- Mars - In evening skies until April 2, then in morning skies rest of 1981.
- Uranus - In Libra until Oct. then in Scorpius for rest of year.

TELESCOPE ROSTER

We are attempting to organize an information roster of telescopes of the
 members of DAS. This roster will be in the form of a photograph of each mem-
 bers telescope along with optical and mechanical information. These photo-
 graphs will also be used for a club "display board" for the May 9th star
 show. Photographs (black & white or color) of all telescopes is requested
 whether purchased or home made.

The photographs (no larger than 5 by 7) and information are needed by April
 24, 1981 and must be brought to a Friday night meeting or mailed to Gary
 Frey, 7570 Crestmore. West Bloomfield, Michigan, 48033.

The information needed is as follows:

Mirror: Size, F/ratio, Date Finished
 Telescope: Type, Date Finished, Date Purchased

Note: Bring your telescope to a meeting if you need a photograph of it
 (polaroid picture -75¢ each)

—Gary Frey

IT FIGURES

A few months ago the Board talked about ordering mirror blanks from Corning and I think this is a good opportunity to do so. Prices obtained from the two major suppliers the first week in March indicate that the price of glass has really gone up; It figures. The two suppliers contacted were United Lens Company of Southbridge, Massachusetts and the Corning Glass Works at Corning, New York. The United Lens blanks are molded and fine annealed, the sides are perpendicular to the top and bottom surface and they are not clear on top or bottom. The Corning blanks are molded and fine annealed, top and bottom, are transparent and the sides are tapered. Generally the United Lens blank is more expensive and they grind out to the edge better than the Corning blanks giving a slightly larger finished diameter.

The prices of various blanks are given in the table below:

SIZE	CORNING		UNITED LENS	
	NOV. 1974	FEB. 1980	NOV. 1979	FEB. 1980
4.25"	\$3.75	\$7.35	\$6.50	\$7.50
6"	6.90	11.70	10.50	12.50
8"	13.50	21.40	20.00	25.00
10"	25.20	50.50	47.00	61.00
12.5"	48.75	85.00	80.00	108.00
				0
DISCOUNT %	25	10	15	15
Amount Needed	\$300.00	\$1000.00	\$1000.00	\$2000.00

As you can see the discount will be impossible as we would need a lot of help to get enough orders for \$1000.00. Since the latest Corning quote is February, 1980, I would expect the price here will soon go up.

Several mirrors were finished within the past month. These included Den Cim-bora's 8" F/7, John Staschke's 10" F/4 Gregorian primary, Mike Manyak's 8.5" F/4.75, and Jeff Fesko's 12.5" F/5. This was Jeff's first attempt at mirror making and I think he should be congratulated for completing a of this size. Marty Kunz has an 8" F/8 mirror that was finished in February along with Gary Frey's 8" F/6.

Kitty Judd is currently re-polishing her 8" F/4.5 mirror; others in the pol-ishing stage are: Frank Grondzieleski (8" F/6), Jan Theisen (8" F/5)

Mike Manyak (4.25" F/6), Milan Radakovic and Son (6" F/8) and John Staschke (3.25" F/2.5).

Currently in the mirror grinding stage are John and Myrna Pendry (8" F/6 mirrors) and Brian Keller and Kevin Dehne are both making 8" F/6 mirrors.

-Michael Manyak, Jr.

STELLAFANE AND THE DETROIT ASTRONOMICAL SOCIETY

The Detroit Astronomical Society is planning to be represented at the Stellafane Astronomical Convention in Springfield, Vermont on July 31 and August 1, 1981. This convention will be a time to show what the Detroit Astronomical Society has done to further astronomy in this area of the country, and an all out effort should be made to present ourselves as a well organized involved club. Springfield, Vermont is approximately 800 miles or 16 hours drive time from Detroit. If there are enough people interested in going, a caravan will be formed.

Each person who has a paid up membership at the D.A.S. and attends the convention will be reimbursed \$10.00 from the Treasury to help defer the cost of gas and lodging.

Motel rooms are still available and can be obtained for you. Lodging averages \$9.00 per night per person, based upon four persons per room. Based upon five people per vehicle and two nights lodging, total expenses (lodging and gas) will be about \$50.00. If you are planning on attending the convention, please sign up and pay \$10.00 deposit by April 24, 1981 to Gary Frey. This deposit can not be refunded if you must change your plans, and the spot cannot be filled.

For further information or questions, call 363-9926 after 6:00 p.m. or contact me at the Friday night meetings.

Gary Frey - Stellafane Coordinator

ONE LONE LIGHT WAVE

From interstellar space comes direct light from a star which is 10,000,000 times more intense than indirect light from its planets. We can see the incident light from the star 10 light years away because of its intensity, but not one light wave of the indirect light wave from its planet can be seen.

Two optical flats each 10 inches long with a fine line 1/50,000 inch wide and 1/50,000 inch deep is scribed on the surface on each flat. The flats are put together so that the fine lines coincide with each other. In the dark chambers in the bottom of the groove the indirect light wave is captured. We assume the direct light wave is larger than the indirect light wave, so the direct wave cannot get thru the super fine slot which is 10 inches long. If the long indirect wave is captured on a fast film located at the end of the 10 inch fine slot, this tells us the star has an invisible planet. We may be able to detect a civilization!

-Frank Lipke

ASTRONOMY DAY—MAY 9, 1981

This year, Saturday, May 9, 1981, has been designated National Astronomy Day, a day to promote the advancement and understanding of Astronomy. DAS will have a display/seminar at the Southfield Library, 26000 Evergreen Rd. @ 101 Mile, Southfield, Mich. Between 2:00PM and 10:00PM, we will have a telescope components display, mirrors being ground, photographic display board of club telescopes, small continuous astronomical slide show, lecture on Basic Astronomy, and completed telescopes for viewing land objects or the Sun during the day and the Moon and Planets at night.

We need members who would be willing to spend a few hours grinding mirrors, answering questions about telescopes or astronomical viewing, setting up their telescopes for viewing objects, passing out information packets about DAS and helping with the night viewing of the Moon and Planets. We would like all types and sizes of telescopes (refractors, reflectors, home made or purchased). If you are interested in helping the Society promote Astronomy Day, please contact Gary Frey before May 1, at the meetings or call 363-9926 after 6:00PM.

-Gary Frey

A DREAM COME TRUE

Well April 10th is fast approaching, and I can hardly wait. In case anyone has lost track, with all the delays and set-backs, this is the proposed date of the Space Shuttle launch.

For as long as we have been sending things into space I have wished I could be there for a launch. Of course I'd rather be aboard but! Well anyway, tentative plans have been made, and it looks as if the dream is about to come true. I may have to miss a few days of work, but if it goes it will be worth it. So for the sake of our Space Program, and those of us going to the launch, keep your fingers crossed. I've got my fingers crossed, and my toes, and my eyes, and

-George Eyster III

SURVIVAL QUIZ

Your spaceship has just crash-landed on the moon. You were scheduled to rendezvous with a mother ship 200 miles away on the lighted surface of the moon, but the rough landing has ruined your ship and destroyed all the equipment on board, except for the 15 items listed next page.

Your crew's survival depends on reaching the mother ship, so you must choose the most critical items available for the 200-mile trip. Your task is to rank the 15 items in terms of their importance for survival. Place the number 1 by the most important item, the number 2 by the second most important, and so on through number 15, the least important.

- Box of matches
- Food concentrate
- Fifty feet of nylon rope
- Parachute silk
- Solar-powered portable heating unit
- Two .45-caliber pistols
- One case of dehydrated milk
- Two 100-pound tanks of oxygen
- Stellar map (of the moon's constellation)
- Self-inflating lite raft
- Magnetic compass
- Five gallons of water
- Signal flares
- First-aid kit containing injection needles
- Solar-powered FM receiver-transmitter

Answers will be given out at the May 8th general meeting and printed in the June/July News Letter.

-Jack Brisbin

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