

STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club



A Different Angle on Climate Change

by Patrick L. Barry

Look toward the horizon in almost any major city, and you'll clearly see the gray-brown layer of smog and air pollution. Yet when you look straight up, the sky can appear perfectly blue; you might think there's no smog at all!

The smog is overhead as well, but it's much harder to see. Why is there such a difference?

It comes down to viewing angles: A vertical line straight up through the atmosphere crosses much less air than a line angled toward the horizon. Less air means less smog, so the sky overhead looks blue. On the other hand, when you look toward the horizon, you're looking through a lot more air. The smog is easier to see.

A one-of-a-kind sensor aboard NASA's Terra satellite capitalizes on this angle effect to get a better view of how clouds and air pollutants scatter and absorb sunlight. By doing so, this sensor—called the Multi-angle Imaging SpectroRadiometer (MISR for short)—is helping scientists fill in a major piece of the climate change puzzle.

Continued on page 2

DID YOU FORGET TO RENEW YOUR MEMBERSHIP IN FAAC?

If you did, it's not too late to renew. We don't want you to miss future issues of Star Stuff. Send your check in today to:

FAAC
P.O. Box 7527
Dearborn, Michigan 48121-7527

Late renewals for 2005 are \$30 (or you can convert to a Life Membership for \$150 and never be late again!)

Please include any updates to your address (snail mail or email), phone number, etc.



President's Corner

by Don Klaser, President, FAAC

First off, I would like to thank the membership for its vote of confidence in selecting me to lead our club! It is truly an honor for me to serve you as President of one of the area's more progressive Clubs. I also want to recognize Dale Ochalek for his leadership in 2004. Thank You, Dale!

I believe our commitment to outreach and education through the many activities we sponsor and participate in during the year backs this statement up. From our relationships with the Detroit Science Center, Henry Ford Community College, and the Metro Parks, to the programs we present at area schools and scouting groups, as well as our Scholarship

Program and Beginner's Nights, we are helping the public appreciate the science and hobby of astronomy and the wonder of the night sky. And all of this is achieved by the knowledge, hard work and dedication of our membership.

This year looks to be a year of opportunities - Cassini/Huygens, continuing discoveries by Spirit & Opportunity, the Mars apparition in November, Astronomy Day in April and the GLAAC event; and challenges - can the American public persuade Congress to allocate the money to repair Hubble, and, will we have more clear nights this year than last? (Paul Gross - can you help us out!!!)

I remember reading a statement that said (paraphrased) that a good leader is one that leads least. I took that to mean

that he enabled others to bring their talents and abilities to the table, instead of doing it for them.

Sounds like a plan !

-- Don Klaser

A Different Angle...

...continued from Page 1

Most satellite instruments look only straight down at the Earth. Layers of airborne particles (called aerosols) and smog are harder to see with this vertical view, and clouds often appear only as two-dimensional sheets of white. Clouds and aerosols both can reflect incoming sunlight back out to space, thus cooling the planet. But they can also absorb sunlight and trap heat rising from below, thus helping warm the planet.

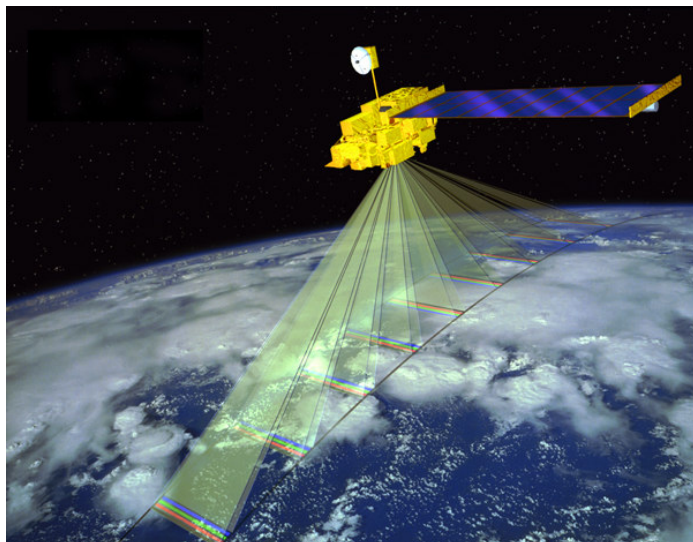
What is the net effect? MISR helps scientists figure this out by looking at the atmosphere at several angles—nine to be exact. Its nine cameras fan out across a range of angles from steeply looking forward (70.5 degrees from vertical), to straight down, to the same steep angle backwards. As the Terra satellite passes over a region, the cameras successively view the region at nine different angles.

From these data, scientists can construct a three-dimensional picture of the cloud cover, revealing much more about cloud dynamics than a flat image alone. They can also see light bouncing off aerosol pollution from nine different directions, thus getting a fuller picture of how aerosols scatter sunlight. And they can even spot thin layers of heat-trapping air pollutants that might go unnoticed by other satellites.

All this information comes just from looking at the atmosphere from a different angle.

For more information, see <http://www-misr.jpl.nasa.gov> . Kids can learn about MISR, see MISR images, and do an online MISR crossword at http://spaceplace.nasa.gov/en/kids/misr_xword/misr_xword2.shtml .

Article courtesy of NASA Space Place.



The MISR instrument on the Terra satellite views the atmosphere and Earth's surface from nine different angles.



STAR STUFF

FEBRUARY 2005 - VOL. 14 - No. 2

STAR STUFF is published eleven times each year by the

FORD AMATEUR ASTRONOMY CLUB
P.O. Box 7527
Dearborn MI 48121-7527

PRESIDENT:	Don Klaser
VICE PRESIDENT:	Ed Halash
SECRETARY:	Dale Ochalek
TREASURER:	Gordon Hansen
NEWSLETTER EDITOR:	Greg Burnett

CLUB INFORMATION

The Ford Amateur Astronomy Club holds regular general meetings on the fourth Thursday of each month, except for the combined November/December meeting held on the first Thursday of December. Meetings are held in the Administrative Services and Conference Center building at Henry Ford Community College in Dearborn. Refer to our website for a map and directions.

The Ford Amateur Astronomy Club observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting.

Observing schedules and additional information are available by calling the FAAC Observing Hotline at 313-390-5456, on the Ford Intranet at www.be.ford.com/astro/faac.html, and on the public internet at www.boonhill.net/faac

Membership in the Ford Amateur Astronomy Club is open to anyone with an interest in amateur astronomy. The Ford Amateur Astronomy Club is an affiliate of the Ford Employees Recreation Association (F.E.R.A.).

Membership fees are as follows:

Annual – New Member:	\$30	(\$15 after July 1)
Annual – Renewal:	\$25	(\$30 after January 31)
Life Membership:	\$150	

Membership includes the STAR STUFF newsletter, discounts on ASTRONOMY and SKY & TELESCOPE magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

MAGAZINE DISCOUNTS

Do not send money to the FAAC for ASTRONOMY or SKY & TELESCOPE magazine subscriptions. Obtain a discount form from the club secretary and send the form directly to the publisher with your subscription to receive a \$10 discount.

STAR STUFF NEWSLETTER SUBMISSIONS

Your submissions to STAR STUFF are more than welcome! Send all items to the editor at skyfog@comcast.net preferably in MS-Word format, but in-line email text is fine too. STAR STUFF will usually go to press the weekend prior to the week of each general meeting. Submissions received prior to that weekend will be included in that issue.

Second Annual FAAC Swap Meet

by Jim Frisbie

Well, I had fun and I hope all those who attended had fun too. Although attendance was down this year, about 85 attended the Swap. The general consensus of those I talked with was everyone enjoyed themselves. We had 15 vendor tables occupied by club members and participants from other clubs around the state. Many items sold well below the prices seen on Astromart and it was a plus for buyer and seller to meet face-to-face. Astro Presentations were new this year and were well received by an average attendance of 12 to 15 people each. The new facility, Holy Cross Lutheran Church, was very accommodating and provided lots of space for the Swap Meet and the Astro Presentations. The Club was able to bank almost \$400 in profit.

A special thanks to the following who gave of their time freely to make the Swap a success: John Kirchhoff of Rider's Hobby for Co-Hosting the event and providing coffee, donuts and pastries throughout the day; Clay Kessler, Gary Strumolo, Gordon Hansen, John Kirchhoff for their efforts in conducting Astro Presentations; Bob Fitzgerald who manned the door selling admission tickets; and all those who helped set up, knock down, and clean up.

I hope next year is even a bigger success!

Welcome New Members!

The Ford Amateur Astronomy Club welcomes the following new members:

James & Polly Buchanan
John Hugener

We hope your membership will be rewarding and enjoyable. Let us know how we can help you enjoy amateur astronomy.

Minutes of the FAAC General Meeting

by Don Klaser for Bob MacFarland

January 27, 2005

The meeting was called to order by President Dale Ochalek at 5:30 p.m. The members introduced themselves and then talked about their observing experiences since our last meeting.

The minutes of the last meeting were accepted as published in Star Stuff. Gordon Hansen gave the Treasurer's report. Dale asked the membership for any presentations they might want to give at an upcoming meeting.

Jim Frisbie announced that the next meeting of the Astro Imaging SIG will be February 10th at 5:30 p.m. in the Rosenau Conference Center rooms where the general membership meetings are held. Please check out the map of HFCC for the exact location if you are not familiar with it.

Recap reports were given on the Lake Erie Metro Park ' Ice Daze ' event, the Forest Elementary science fair program, and the presentation at the Webelos Blue & Gold banquet at St. Thomas a' Beckett Church in Canton.

Garry Stahl gave us an update on his search for a cabinet to house our club library. The quest continues. Jim Frisbie spoke about the upcoming Swap Meet on Saturday, Feb. 5th, and the annual club dinner party at Station 885 on Saturday, April 2nd. Ed Halash reported on the search committee's work in securing a new club observing site. Greg Burnett continues to work on putting together a compilation of the first 10 years of the Star Stuff newsletter on CD.

The election of Officers for 2005 was held, conducted by Doug Bock. The following individuals were elected:

President - Don Klaser
Vice President - Ed Halash
Treasurer - Gordon Hansen
Secretary - Dale Ochalek

Congratulations Gentlemen !

After the election, a round of " Ask the Astronomer " was held. The meeting was adjourned at 7:00 p.m.

Submitted by Don Klaser for Bob MacFarland.

FOR SALE...

Meade ETX-125EC "Go To" Telescope Outfit, including...

AutoStar Electronic Controller
LX-10 Heavy Duty Tripod
Right-Angle Finder Scope
Meade 26mm Super Plossl Eyepiece
#775 Hard Carrying Case
#64 Camera Adapter
Thousand Oaks Full-Aperture Type 2-Plus Solar Filter
Celestron Vibration Suppression Pads
#765 Soft Accessory Bag
Custom Pictorial Dew Sleeve

Like-New Condition, barely used; includes over \$350 worth of accessories...Yours for \$800.00. Contact Vicki Burnett at vlb02@comcast.net

FAAC in the FREEP

by Greg Burnett

Thanks to **Mike Bruno** for bringing the following to our attention...

In their January 27 online edition, the Free Press published an article by staff educational writer Lori Higgins covering the Forest Elementary School Science Fair where the FAAC and the Detroit Science Center conducted astronomy outreach activities. The following excerpt is reprinted here under copyright fair use...

"Participants were supposed to see real stars, courtesy of a huge telescope brought by Don Klaser, vice president of the Ford Amateur Astronomer's Club. But like the last two years, it was too cloudy outside.

"So, the Meade Schmidt Newtonian telescope was stationed at the end of a long hallway, capturing the imagination of students like fifth-grader Michael Hoover.

"I love space, and I love astronomy. I have a telescope of my own," said Michael, 10. "I've always wanted a big one like that."

Read the entire article at...

http://www.freep.com/news/cfp/9/jscience27j_20050127.htm

Notes from the FAAC Board

by Dale Ochalek

February 3, 2005

In attendance were Gordon Hansen, Bob Fitzgerald, Jim Frisbie, Bob MacFarland, Don Klaser, Ed Halash, and Dale Ochalek. Ed Halash presided over the meeting initially, until Don Klaser could arrive.

We began by looking at and reviewing future possible presentations. Jim Frisbie offered to do "What to do when you can't see the stars." Gary Strumolo has recently offered a topic or two for technical discussion. Greg Burnett was said to have offered to reprise his Sundial presentation. We also have a DVD on the Cassini mission that should be used before too long.

The presentation for next general meeting, February 24, will be provided by guest speaker Prof. Rather from Wayne State, as suggested by Vicki Burnett. This talk may require an hour or more, so we will change the arrangement of agenda at the February meeting to accommodate.

In the cause of the proposed club library, Ed Halash will contact our librarian-to-be, Gary Stahl, regarding cabinet purchase, and hope to get a commitment for purchase arrangement. The board agreed to fund a purchase price of under \$200.

The board discussed the FAAC membership list availability; currently board members can get a copy on request for club business. Possibly we could publish a list, if secured, on our web site.

Astronomy Day is April 16. It was mentioned that Detroit Science Center and John Schroer will be working with Astronomy magazine on the DSC effort. We will need to begin to consider our FAAC Astronomy Day efforts as soon as possible. We will need to have sign-up sheets at the general meeting for perhaps three different sites, including choice of DSC, perhaps Kensington, HFCC, Island Lake. Typically Clay Kessler and Doug Bock attend the Cranbrook activities. As a general rule the board agreed to encourage use of sign-up sheets at general meetings, for volunteering at FAAC events, to enable better member participation. John Kirchhoff has also proposed a Beginner's Night in conjunction with Astronomy Day.

Regarding Annual FAAC Dinner plans, Jim Frisbie is to meet soon with the restaurant people, and will finalize details and costs, and furnish a flyer to be forwarded to the club and newsletter editor. We will need to bring sign-up sheet to general meetings in February and March.

The board decided there will be no 50-50 raffle next meeting or after until further notice.

DSC now charging rent of \$600 for portable planetarium. Don Klaser to follow up w /planetarium - Todd Schlisser, to

see if any arrangements and considerations might be made. We may want check on copyright for Astro 101.

For future consideration - do we want to purchase - PA system? Gordon Hansen to investigate.

Jim Frisbie reminded us regarding the Swap Meet on Feb. 5. There is an 8 am setup - classroom rented also for presentation. Someone will announce each presentation a few minutes prior to the start.

Gordon Hansen informed the board that the current membership renewal effort lacks only about 27 members for complete sign-up. John Kirchhoff was praised for efforts in garnering new members though exposure at his Ryder shop and beginner's nights.





Submitted by Dale Ochalek.

Astronomical Calendar





by Jim Frisbie

All times are Eastern Standard Time or Eastern Daylight Saving Time, whichever applies.

FEBRUARY

	2	We	Last Quarter Moon (2:23 am)
	3	Th	Moon near Antares
	5	Sa	Mars near Moon
	8	Tu	New Moon (5:28 pm)
	15	Tu	First Quarter Moon (7:18 pm)
	21	Mo	Venus at Aphelion
	23	We	Full Moon (11:53 pm)
	27	Su	Jupiter near Moon

MARCH

	3	Th	Last Quarter Moon (12:36 pm)
	10	Th	New Moon (4:10 am)
	12	Sa	Mercury at maximum elongation
	17	Th	First Quarter (2:19 pm)
	20	Su	Vernal equinox (7:33 am)
	25	Fr	Full Moon (3:58 pm)

This information was obtained from the Henry J. Buhl, Jr. Planetarium in Pittsburgh, PA.

STAR STUFF Submissions

by Greg Burnett

The *STAR STUFF* newsletter is the print and online journal of the Ford Amateur Astronomy Club, recording and documenting the activities and accomplishments of the FAAC membership. *STAR STUFF* readers want to know what you've been up to! Share your articles, stories, book reviews, equipment reviews, poetry, event photographs, astrophotographs, or anything of interest by publishing them

in *STAR STUFF*. These make the newsletter *yours* and a true reflection of the activities of our club.

IMPORTANT: Your contributions are welcome any time...please do not feel you are working to a deadline if you'd like to submit something. However, if you are aiming at a particular issue, you normally need to get your material to the editor sometime during the third week of the month, the week prior to the meeting week. **Send submissions to skyfog@comcast.net** You can email in-line text, or MSWord, or whatever is convenient for you...the editor will coerce it into the proper format for the newsletter.

ALSO IMPORTANT: Do not think you must be a Pulitzer Prize contender to write something for your newsletter. The membership is interested in hearing your ideas, experiences, and opinions. Please share them freely.

Thanks for your continued support.

AstroPhysics Phun Phacts

by Vicki Burnett

FEBRUARY BIRTHDAYS . . .

Feb 4, 1906 - Clyde Tombaugh
 Feb 13, 1852 - J.L.E. Dreyer
 Feb 14, 1898 - Fritz Zwicky
 Feb 15, 1564 - Galileo Galilei
 Feb 16, 1786 - Francois Arago
 Feb 19, 1473 - Nicholas Copernicus
 Feb 26, 1842 - Camille Flammarion
 Feb 27, 1897 - Bernard Lyot

Treasurer's Report

by Gordon Hansen

January 27, 2005

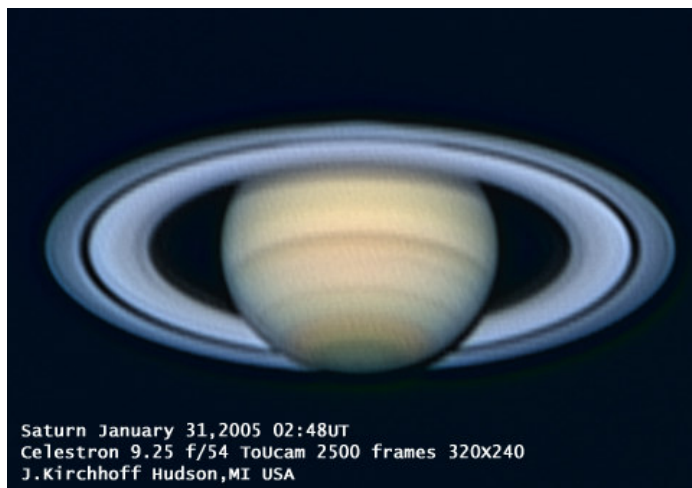
Bank Accounts	
Checking	\$ 481.47
Savings	\$ 1,582.62

TOTAL Bank Accounts	\$ 2,064.09
Cash Accounts	
Cash Account	\$ 157.22

TOTAL Cash Accounts	\$ 157.22
Asset Accounts	
FERA Ticket Sales	\$ -
GLAAC	\$ 795.00
Projector	\$ 767.25
Scholarship	\$ 139.60
Swap Meet	\$ 60.00

TOTAL Asset Accounts	\$ 1,761.85
OVERALL TOTAL	\$ 3,983.16

Astrophotography

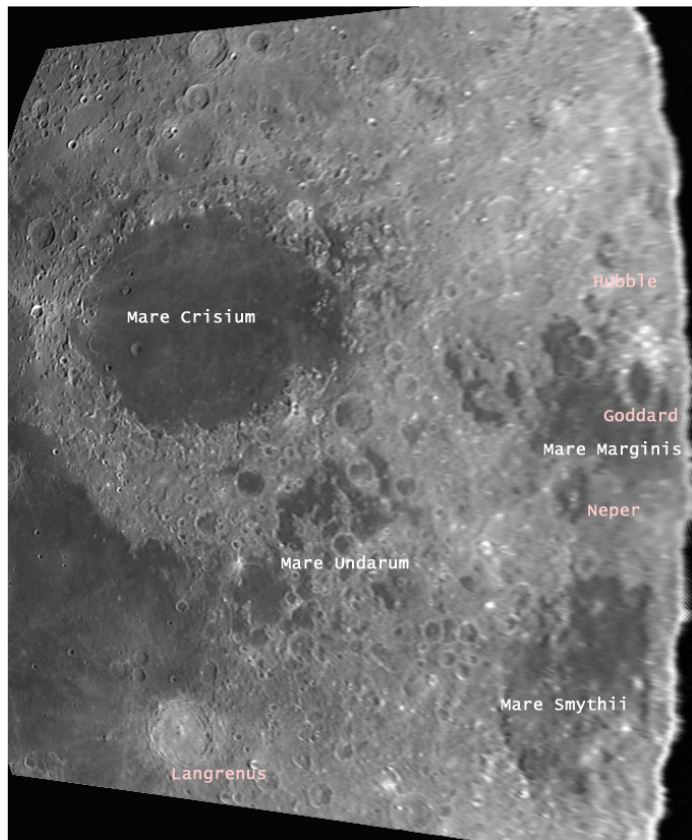


John Kirchhoff

This image is from a series of 5-3 minute avi's shot at 5fps. Used a 5X Powermate with the ToUcam in 320X240 format. Exposure 1/25second saturation 100% brightness50% gamma 0% and gain 70%.

-- John Kirchhoff

The frame below has "unwrapped" the curvature of the Moon. John promises to tell us more about this process in a future article. --Ed.



John Kirchhoff

Ford Amateur Astronomy Club

Beginner's Night at Island Lake

**Saturday from 7:30pm to Midnight
April16/May14/June11/July16/August13**

Do you have a new telescope that you would like to learn to use? Do you want to see samples of what the night sky has to offer? You should consider coming out to Island Lake Recreation Area on Beginner's Night. These nights are dedicated to providing equipment and observing assistance to new astronomers.

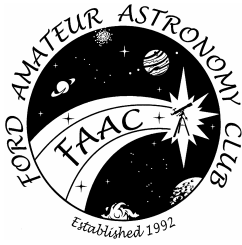
(The event will take place on the date indicated regardless of sky conditions, cloudy or clear. If it is raining, the event will be cancelled.)

The exact location of the observing site is the "Spring Mill Pond" parking lot and picnic area, at the Island Lake State Recreation Area, on Kensington Road, south of I-96 between South Lyon and Brighton.

For more info or details on this event, send an E-mail message to riderslivonia@aol.com or check the club website at www.boonhill.net/faac

You may also contact John or Dan at Rider's Hobby Shop 734-425-9720

The Ford Amateur Astronomy Club observes at the Island Lake site on Friday and Saturday evenings year round, provided skies are clear. You are welcome to visit the observing site on any weekend, but you must be with a club member if you plan to observe after 10PM. Call 1-313-390-5456 to find out if anyone is going out on any particular night.



FAAC DINNER BANQUET 2005

SATURDAY, APRIL 2, 2005
6:00 pm until ?

ASTRO SLIDE SHOW – PRIZES – ASTRO QUIZ

LOCATION: This years Dinner Banquet will be held at **Station 885**, located at 885 Starkweather, Plymouth, Michigan 48170, telephone 734-459-0885.

DINNER SELECTIONS:

❖
10oz. Prime Rib of Beef au Jus

or

Pan Seared Salmon

or

Chicken Marsala

❖

All dinner entrees will include fresh vegetable medley, Chef's roasted herb potatoes, and a mixed green salad.

❖

Dessert Delectable of White Chocolate Mousse filled Eclairs.

❖

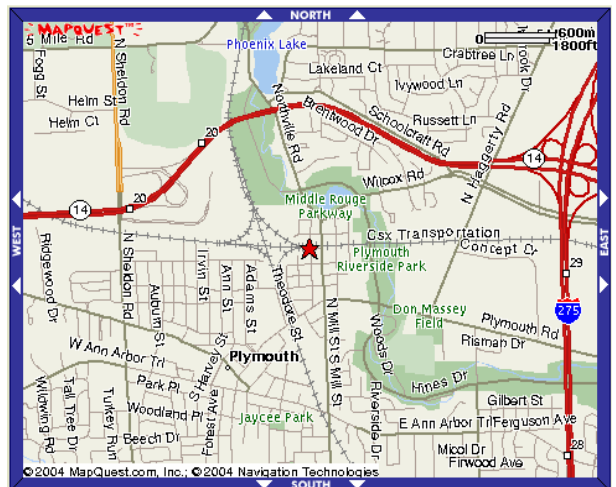
Coffee, tea, iced tea, and soft drinks will be available throughout the evening.
A Cash Bar will be available. Please ask your server for a selection of beer, wine, and mixed drinks.

ADMISSION: \$29.00 per person.

COCKTAILS AT 6:00 PM, Cash Bar, Dinner at 7 pm.

MAKE CHECKS PAYABLE: Please pay Gordon Hansen at the General Meeting, call Diane Worth or Send payment to Ford Amateur Astronomy Club, P.O. Box 7527, Dearborn, MI 48121-7527. "Thank you for another great year. We hope to see you there. Please let us know if you are coming!" **FAAC Board.**

LOCATION: The restaurant, **Station 885** is located 3 blocks north of Plymouth Road, just east of downtown Plymouth. * See STAR on map*



For More Information: Contact Diane Worth via email: dianesails@sbcglobal.net or call (248) 737-5131 or Jim via email: w8tu@comcast.net or call (734) 453-1422

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