



★ STAR STUFF ★

The Newsletter of the Ford Amateur Astronomy Club

February 2003
Volume 12 Number 2



Editor: Jim Frisbie

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STAR STUFF is a monthly publication of the Ford Amateur Astronomy Club, an affiliate club of the Ford Employee Recreation Association.

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<http://www.boonhill.net/faac>

Submissions to STAR STUFF are welcome Please write to the address above or contact the editor:

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Dead line is the 15th of each month of publication.

Officers:

President	Don Nakic
Vice President	Dale Ochalek
Secretary	Don Klaser
Treasurer	Gordon Hansen

General Meetings:

The Ford Amateur Astronomy Club holds regular general meeting on the fourth Thursday of each month (except the combined November/December meeting held the first Thursday of December) at 5:00 PM at the Ford Motor Credit Building off Mercury Drive near Michigan Ave. in Dearborn.

Observing:

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

Club Information:

Observing schedules and additional Club information is available by calling the Observing Hotline at: (313) 390-5456 or via the Ford Intranet: www.be.ford.com/astro/faac.html or the public Internet: www.boonhill.net/faac.


Club Membership:

Membership in the Ford Amateur Astronomy Club is open to Ford employees and non-employees. Write or call for an application.
Annual - New Member: \$25; Renewal: \$ 20 (before Jan 31 of each year)
Lifetime - \$ 150

Membership includes:

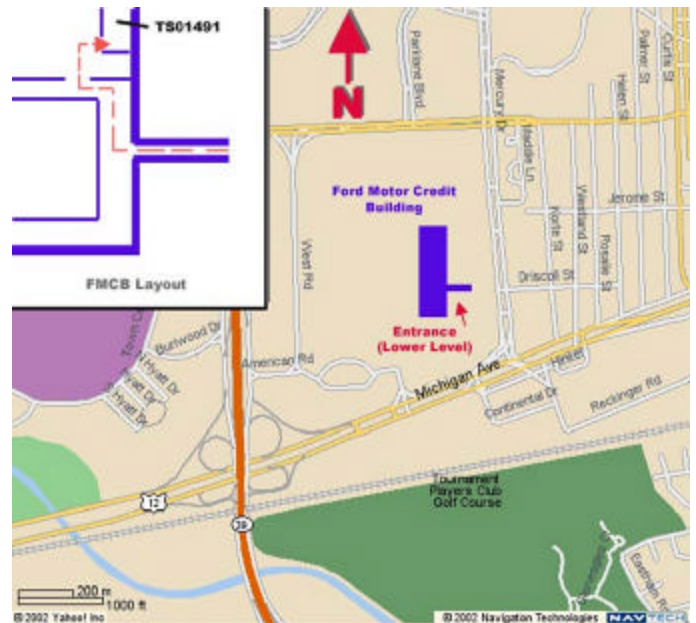
A subscription to the STAR STUFF newsletter and the quarterly newsletter the REFLECTOR published by the Astronomical League.
Discounts on ASTRONOMY and SKY & TELESCOPE magazines, after-hours access to the observing site and discounts at selected area equipment retailers.

Magazine Discounts:

Do not send money to FAAC for SKY & TELESCOPE or ASTRONOMY magazine subscriptions. We have a form that you send in with your subscription directly to the publisher to receive a \$10 discount. Pick up a form at the next meeting, or contact a club officer. 

***** NEW MEETING LOCATION *****

Effective February 27, 2003 the Ford Amateur Astronomy Club General Meeting (4th Thursday of each month) will be held at the Ford Motor Credit Building located off Mercury Drive in conference room TSO1491. This is the same place that we used to meet prior to last year. Enter building Only from the ground floor entrance closest to Michigan Ave. Upon entering, follow the hallway to your right. Once it jogs to the left, take the first right, turn to the next hallway. Shortly after this turn, the conference room will be on your right. AGAIN, ONLY USE THIS ENTRANCE FOR SECURITY REASONS.



FAAC MEMBERSHIP RENEWAL FEE DUE

2003 FAAC Membership dues are past due! Gordon Hansen our new FAAC Treasurer will accept payment through February 28. New Membership \$25 and Renewal \$20. Past members with unpaid dues by February 28th will be removed from the mailing list.

**MINUTES OF THE JANUARY 23, 2003
FAAC GENERAL MEMBERSHIP MEETING**

By Don Klaser

The meeting was called to order by President Don @ 5:00pm. The membership introduced themselves as they enjoyed pizza & pop. Mike Bruno gave the Treasurer's Report. The minutes of the Nov-Dec Meeting were approved. We are going to be moving our meeting site back to the Ford Credit Bldg. On Michigan Ave. This change is effective with the February 23rd meeting. Dale Ochalek talked about the FAAC Library – members are to provide a list of the item(s) they would be willing to donate or lend at the next meeting. Bob Gitzgerald spoke about the FAAC Scholarship Fund. Applications were made available for the members to give to interested parties. Gordon Hansen, Don Sommer and John Schroer will make up the selection committee. George Korody gave a report on the imaging SIG. The FAAC Dinner Party is scheduled for March 15; we will be having it at a new location because Kiernan's doesn't do banquets anymore. Several members commented on our recent involvement at the Lake Erie Metropark Ice Daze program. The Club will be taking part in a program at Lake Erie Metropark for the Lunar Eclipse on Thursday May 15, 2003. Don Klaser reported that Club will be making our Astronomy 101 presentation at Forest Elementary School in Farmington Hills on Tue., February 4th from 6:30pm – 8:30pm. The Club will be going on a field trip to the Detroit Science Center this Saturday, January 25, at 9:00am. Jeff Thrush talked about the upcoming Fish Lake Astro Imaging Workshop from 1-31 to 2-2. President Don will be meeting with the head of Ensign Planetarium @ Crestwood School in Dearborn Hts. about the Club going there for a presentation. Board Elections were held – the following persons were elected to lead the Club for 2003: President – Don Nakic; V. President – Dale Ochalek; Treasurer – Gordon Hansen; Secretary – Don Klaser. Ken Anderson gave a technical presentation on Astronomical terms. The meeting was adjourned at 6:55pm.

TREASURER'S REPORT – 1/23/2003

By Mike Bruno

Balance on hand:	Checking	\$ 826.09
	<u>Savings</u>	<u>\$1,423.85</u>
Included in above	Scholarship	\$(629.13)
	GLACC	\$(319.00)
		=====
Cash Available		\$1,301.81

A MESSAGE FROM THE PRESIDENT

By Don Nakic

I would like to thank everyone for voting me as FAAC President for 2003. I would also like to welcome the new board members Dale Ochalek as Vice President, Gordon Hansen as Treasurer, and Don Klaser as Secretary. Next, I would like to acknowledge Mike Bruno for his outstanding contribution as Treasurer for the past three years and Ken Anderson as Vice President for 2002. Lastly, I would like to thank Jim Frisbie for his superb efforts in pulling together article's from club members into our monthly Star Stuff newsletter.

Last year when I was voted as FAAC President I gave my personal goals for the year. I would like to continue that tradition. This year I have three primary objectives: establish a permanent location for our general meetings, plan more field trips, and continue to promote the clubs knowledge on the hobby and science of astronomy.

In March of last year we moved our general meeting location from the Ford Credit Building to the Family Service and Learning Center. There were some advantages and a few disadvantages to this location. For the advantages, the location provided a welcoming atmosphere due to the lack of secured access doors, large conference rooms (some with computer work stations), a library with provisions to locate the club's future library material, multi-media equipment, and a friendly staff to aid in setting up the conference rooms. The two disadvantages were the limited hours to which the building was open (eliminating discussions after the meeting) and the volatility of the center's schedule for 2003 (available dates were subject to change each month). The first part of this year we will be going back to our previous location. However, the board will be looking for a permanent location that meets all of our needs. If you have any ideas let me know. In the meantime I will keep you posted on all updates.

The one area that I feel has gained a lot of attention is the field trips. So far we held a trip to Eastern Michigan and then to the Detroit Science Center. Both events have drawn a sizeable crowd. In fact, I counted about 48 people at the last event. I plan to have at least three trips this year to local science centers, planetariums, and universities.

The next area I feel passionate about is building the clubs knowledge of astronomy. As I discussed in prior articles, my time span in the hobby is relatively short. I'm still learning and finding where my interests lie. In the meantime, I've just been attempting to take in everything. I have a feeling that there are some club members that share in this view. Now how does this apply to the club? My goal is to have presentations on a wider assortment of topics. You just never know what you may take a liking too. A good example of this was a presentation Clay Kessler gave on processing color film (C41 process) at the Fish Lake Astrophotography Workshop sponsored by Norbert Vance of Eastern Michigan University. Having developed only black and white film I felt that color

film development was very complicated and not worth attempting. Well, Clay put that notion to rest. Within a period of an hour he demonstrated the various steps on one of his color negatives with impressive results. I'm starting to develop an inkling to develop color film at star parties.

FAAC is growing at a fast rate and the momentum continues to build. I look forward to direct the club through these challenges I set forth for 2003.

SHUTTLE COLUMBIA

From Nancy Leon

On February 3, 2003 I received the following email from Nancy Leon. Nancy is with the Jet Propulsion Laboratory at the California Institute of Technology, a contactor to NASA.

I really want to thank all of you who have sent messages of condolence about the loss of the space shuttle Columbia. I have passed along your messages to the area within NASA that works with the shuttle crew, and I know that your expressions will mean so much to the families. I also wanted to share with you the experiences of Tom Sevcik from the Salt Lake Astronomical Society. With Tom's permission, his e-mail is below. It describes his videotaping of the re-entry. His video is also attached. Tom has uploaded this to the specific site where NASA has requested all videos to be sent. Tom has also requested to know of any other astro club members who may have witnessed this tragedy. If you or one of your club members have an eyewitness account that you would like to share, I would be happy to send it out to all. Just send it to me, and I will see that all the clubs we work with receive it (via this e-mail list.)

NASA has put a special page on the web for the latest info on STS 107. You can find it at <http://www.nasa.gov/columbia/>

I also wanted to point you to the STS 107 mission insignia. These insignias are unique to each mission, and designed with the input of the individual astronauts. The STS 107 insignia and its accompanying description can be found at <http://spaceflight.nasa.gov/gallery/images/shuttle/sts-107/html/sts107-s-001.html>

Again, my sincere thanks to you for your kind and caring words. I feel so lucky to work with each of you.

Nancy

Date: Sun, 02 Feb 2003 20:11:50 -0700
From: Thomas Sevcik <sfv1ts@hotmail.com>
Subject: Shuttle clip
X-Originating-IP: [67.2.139.156]
To: Nancy.J.Leon@jpl.nasa.gov
Bcc:
iPlanet-SMTP-Warning: Lines longer than SMTP allows found and truncated.

February 2003

X-OriginalArrivalTime: 03 Feb 2003 03:11:51.0204 (UTC)
FILETIME=[FF035640:01C2CB31]

Dear Nancy,

I still find it hard to fully accept the fate of the space shuttle Columbia yesterday morning and realizing I have video of the very beginning of its tragic ending.

My daughter Georgia and I worked the day before (she got off work at 10 p.m. Friday) and we left Salt Lake about 11:30 p.m. We drove for just over 4 hours to within 20 miles north of St. George, Utah. I didn't want the city's glow to interfere with my filming the reentry, so we didn't get right under the path the shuttle was to travel over the city.

We took an exit off of I-15 where there was nothing but farm land and found a dirt road to about the center of a field. I set up my two roll-film cameras and let my daughter handle the videotaping. Right on schedule, at 6:56 a.m., she spotted the shuttle in the dark northeast skies. What a beautiful sight! I had no idea, as this was my first time seeing a shuttle reentry, what I would see. I hope to get the pictures back Tuesday, even though I was only able to snap 2 or 3. I didn't realize just how fast it would go almost directly over our heads. My daughter had a hard time keeping up with it in the video camera's viewfinder, but she filmed it until it disappeared behind some reddish clouds in the southwest at sunrise. We heard the sonic boom as expected, but had no idea that in 2 to 3 minutes after it disappeared from view what was to take place. We hadn't gotten around to replacing the radio/CD player that was stolen from her car, so we couldn't listen to an.

Both of us had been awake for nearly 30 hours and so after the long trip back home we went to bed. I happened to wake up just before 5 p.m. and started to check the astronomy list-serve messages and realized at that moment that something terrible had happened to the Columbia. I turned the TV on just at the very start of news and sure enough, the messages were true. They showed a couple of videos from a local amateur astronomer in our club and one from a St. George resident.

I had my daughter hook up our camera to the TV and couldn't believe what we were seeing. My daughter then spent hours trying to transfer the first portion of the video onto a disk and finally succeeded. The attached file should be easy to open. You can run it at normal speed or frame-by-frame (which I prefer). Also, adjust the contrast on your monitor so that the contrail is easier to see. At the 6 second mark you'll see a sudden and unexpected brightening of the plume and about 2 or 3 seconds after that, something (maybe tiles?) that appear in the trail. It has been confirmed on news this evening that what many of us caught on video was indeed debris coming from the shuttle.

I've sent this clip to NASA already and when my daughter gets home tonight I'll have her help me send the entire video following the instructions I got from their website.

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If you'd like to share this clip with any of the other editors that receive your wonderful Space Place News, please feel free to do so. Do you know if any of the other editors witness the Columbia that morning? It would be nice to get some input if they did so I could include it with the next edition of the NOVA so that the club members could get the opinions and different views by other amateur astronomers.

I apologize for this being so long!

Have a good day!

Tom Sevcik



Crew: Shuttle Columbia

SEVEN STRANGERS?

By Dr. Tony Phillips

At the dawn of the space age some 40 years ago, we always knew who was orbiting Earth or flying to the Moon. Neil Armstrong, Yuri Gagarin, John Glenn. They were household names-- everywhere.

Lately it's different. Space flight has become more routine. Another flight of the shuttle. Another visit to the space station. Who's onboard this time? Unless you're a NASA employee or a serious space enthusiast, you might not know.

Dave Brown, Rick Husband, Laurel Clark, Kalpana Chawla, Michael Anderson, William McCool, and Ilan Ramon.

Now we know. Those are the names of the seven astronauts who were tragically lost on Saturday, Feb. 1st, when the space shuttle Columbia (STS-107) broke apart over Texas.

Before the accident, perhaps, they were strangers to you. But if that's so, why did you have a knot in your gut when you heard the news? What were those tears all about? Why do you feel so deep-down sad for seven strangers?

Astronauts have an unaccountable hold on us. They are explorers. Curious, humorous, serious, daring, careful. Where they go, they go in peace. Every kid wants to be one. Astronauts are the essence of humanity.

They are not strangers. They are us.

While still in orbit Dave Brown asked, jokingly, "do we really have to come back?"

No. But we wish you had.

EQUIPMENT REVIEW – THE NEW HEWLETT PACKARD PHOTOSMART PRINTER WITH PHOTORET IV

By Clayton Kessler – November 2002

Almost six years ago I started using the Hewlett Packard "PhotoSmart" printer to print my astrophotos. This has been a great printer and has printed literally hundreds of 8 1/2 X 11" photographs over the years. One of the keys to it's success is the 6 color printing that this machine uses – no other HP printer used 6 color printing not even later model "PhotoSmart" printers. Unfortunately, the original "PhotoSmart" paper has been unavailable for several years and I cannot find another paper that I like as well. In addition, the ink cartridges – while still available – are getting harder to find.

Every so often I run into a Hewlett Packard Factory Representative at a computer or office supply store. I always ask "When will you produce another premium quality, six color, printer like my original "PhotoSmart"?" The answer I consistently get is "All the current models use 'PhotoRet III' – wait until you see 'PhotoRet IV'."

PhotoRet IV was "vaporware" for about three years. A few months ago I was in an office supply store looking for ink cartridges. The salesman did not have any PhotoSmart cartridges for me but he asked "had I seen the new printers?" I replied – "I will not buy a new photo printer unless it is a six color process". The salesman replied – "These are new from HP, they are six color and they use the new PhotoRet IV"! Oh man – the long awaited PhotoRet IV! I looked at a sleekly designed printer, and it did indeed use a tri-color ink cartridge and a second tri-color photo cartridge. The only problem that I saw was the photo cartridge had to be loaded in place of the

black cartridge in order to print photos. I successfully worked my way out of the salesman's grasp with my wallet intact but as I left the store...the seed was planted.

Weeks went by (well – a couple at least) and I still had not found the ink cartridges that I needed. I stopped by the Ann Arbor Comp-USA one afternoon and there was the entire line of new HP PhotoSmart printers. A talk with the HP Representative (who just “happened” to be there) gave me the rundown on the printers. Several models were available ranging from about \$150.00 (model 7150) to the “high end” machine – the 7550 at \$399.00. This was the interesting one to me because it had a small color LCD display and the provisions to accept all kinds of digital camera memory cards. You can print these without using a computer or you can download the card to your computer drive through the printer connection.

The high end machine also has what is extolled as “7” color printing – what this means is that two “three color” ink cartridges and a third black cartridge reside in the printer permanently. Only the six color inks are used in photo printing but this has the advantage of not needing to change ink for text or photo printing.

I was much weaker this time and a printer followed me home! After using this for a few months I can say, without a doubt, this is the best printer I have used for photographs. Controls are simple to use, the printer is quite tolerant of different kinds of photo paper, I have been using Ilford and Kodak and the quality is outstanding! The software included with the package includes utilities to download and catalog digital photos and works very well.

As we approach the Christmas season I see the printer is being offered “on-sale” at \$299.00 – a great bargain in my mind. I have been using my printer to make prints of the new home construction taken with a small digital camera. In spite of the low resolution 1.3 megapixel images, the 8 X 10 prints are astonishingly good. Astrophotos are better than my old PhotoSmart and as a bonus the ink and paper seems much more resistant to humidity and moisture.

I cannot say how pleased I am with this printer. I can only quote what I said about the original HP PhotoSmart printer:

“Hewlett Packard has done it again - this PhotoSmart system is the real deal. They have transformed my computer into a darkroom and allow me to get the most from my modest astrophotographic efforts. No stinky chemicals, no fussy time limits and no fumbling around in the dark! A **digital** darkroom is the way to go for me.”

Now all I need is a six-color tabloid sized (11 X 17) printer that uses PhotoRet IV..... any takers Hewlett Packard?

A LITTLE HUMOR

Submitted George Korody

Judi was talking to Monika one morning about a recent NASA news article.

Judi said, "I can see how astronomers figure out the distance of stars and their size and temperatures and all that. But there's one thing I can't figure out."

"What's that?" Monika asked.

"How do they find out what the stars' names are?"

RIDDLE OF THE MONTH

Submitted by Pat Korody

When is a Meteor no a Meteor?

INDIAN ASTRONOMER SELECTED FOR NASA'S HUBBLE RESEARCH – 7 Feb 2003

Submitted by Abhijit Sengupta

PUNE, India: An astronomer from this western Indian city has been selected by NASA to join research on data collected by a space telescope. NASA's Space Telescope Science Institute (STScI) has invited 30-year-old Yogesh Wadadekar to join a crack team of researchers for the Hubble Space Telescope (HST) programme.

"I am thrilled to be selected and, like Kalpana Chawla, I too will strive very hard to reach for the stars," a beaming Wadadekar told IANS at his residence in this city in Maharashtra state. He was referring to India-born astronaut Kalpana who was killed Saturday along with six others when US space shuttle Columbia exploded in the skies above Texas just minutes before touchdown. Wadadekar, a product of Pune's Inter-University Centre for Astronomy and Astrophysics, said: "it is great fun to do research in astronomy as new telescopes, space-based telescopes and observatories are becoming operational." He said his main task at STScI would be "reprocessing data obtained for the archival parallels programme" using HST's Wide Field Planetary Camera II (WFPC-II). He explained that HST, while recording the main observations with its prime focus, simultaneously records observations at random positions in the sky with the help of WFPC-II. "This data will be analysed and its findings will shed light on many fields like galactic structure, cosmic shear and galaxy evolution," added Wadadekar, who worked for two years at the Paris-based Institute of Astrophysics.

HST, with the help of WFPC-II, has recorded over 3,000 observations and Wadadekar said he would study this huge data along with other scientists using novel image processing techniques. STScI is a recognised leader in operating space-based observatories and engages the services of astronomers, computer scientists, technicians as well as communication professionals from the Association of Universities for Research in Astronomy, the European Space Agency, the Computer Science Corporation and others.

In Paris, Wadadekar had worked for Project GalICS (Galaxies in Cosmological Simulations) under two eminent French professors, Bruno Guiderdonei and Alain Omont. "The research work involved working with output of simulations of galaxy formations and evolution to make predictions about extra-galactic observations with ongoing and future astronomical surveys," he said.

The astronomer's proud father, Raja Wadadekar, a former director of Pune-based Computer Science Centre, said: "Ever since my son made a six-inch telescope in 1984 when he was in high school, I knew he was headed for the big time." In 1986, Yogesh Wadadekar got involved deeply in astronomy when Halley's Comet was visible in the night sky and became a member of Pune's Jyotirvidya Parisanstha (Amateur Astronomers' Association) that conducted star gazing camps five times a year.

**FAAC
February 27, 2003
General Membership Meeting
5:00 pm to 6:45 pm
Agenda**

- Introductions	Don Nakic	20 min
- Reports: Treasurer's Secretary's	Gordon Hansen Don Klaser	5 min
- Old/New Business	Don Nakic	20 min
- Upcoming Events	Don Nakic	10 min
- Tech: Hand Rendering	Don Nakic	15 min
- Mars Opposition	John Schroer	35 min

ASTRONOMICAL CALENDAR

February 2003

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

February 23 Last Quarter Moon 11:46am

February 25 Mars near Moon - morning
February 27 Venus near Moon - Morning

March 2003

March 1 Mercury near Moon - morning
March 2 New Moon - 9:35pm
March 10 Moon near Saturn - evening
March 11 First Quarter Moon - 2:15am
March 14 Moon near Jupiter - evening
March 18 Full Moon - 5:34 pm Cow/Lenten Moon
March 20 Equinox - 8:00pm
March 24 Last Quarter Moon - 8:51pm
March 25 Moon near Mars – morning
March 29 Moon near Venus - morning

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

FAAC CALENDAR

Activity	Date	Time
- Ice Days	Jan 18	4 pm
- General Meeting	Jan 23	5 pm
- DSC Field Trip	Jan 25	9 am
- FAAC Board Mtg	Feb 13	5 pm
- General Meeting	Feb 27	5 pm
- FAAC Board Mtg	Mar 13	5 pm
- FAAC Dinner	Mar 15	6 pm
- General Meeting	Mar 27	5 pm
- FAAC Board Mtg	Apr 10	5 pm
- General Meeting	Apr 24	5 pm
- FAAC Board Mtg	May 8	5 pm
- UMD Star Party	May 9	9 pm
- General Meeting	May 22	5 pm
- FAAC Board Mtg	Jun 12	5 pm
- General Meeting	Jun 26	5 pm

FAAC FIELD TRIP TO THE NEW DETROIT SCIENCE CENTER – PLANETARIUM

By Gordon Hansen

On Saturday, January 25, 2003 about 50 FAAC members, family, and friends got an inside look at the Detroit Science Center's Planetarium and IMAX Theatre. John Schroer, Planetarium Education Coordinator and FAAC member, hosted the event and was joined by several staff members.

Club members started arriving at 9 AM – before the DSC was open to the public. Till everyone arrived we had the place to ourselves and got the change to play with some of the hands

on exhibits. They have two floors full of exhibits, so, we barely scratched the surface.

Once all were there we entered the Planetarium and were treated to the current show including a tour of the planets, views of the solar system from above and below the ecliptic plane, a look at the constellation Orion from Earth and from another vantage point in the galaxy. Did you know that Alnitak, Alnilam, and Mintaka (Hey, if I don't write their names down I'll never remember them!) of Orion's belt only appear as a straight line from Earth? Then off on a roller coaster ride – forward and backwards! (Who needs Cedar Point?) We also got to see the asterism *Sponge Bob* – funny I can't find that one on any star charts.

Then the real fun began. We had the opportunity to put the Planetarium equipment through some of its paces. We speeded up the *precession* of the earth's axis some tens of thousands of years. Did you know that Polaris will not always be our pole star? (The earth's axis wobbles similar to a gyroscope, making one rotation every 26,000 years.) We also simulated this summer's Mars opposition.

Then we went on a tour of inner workings. The dome is 50-foot wide and three-stories high. The sound comes from of a 13,000-watt Dolby Digital 5.1 Surround Sound system and two computers run the show. The computers drive the main star projector and coordinate something like 36 slide projectors. The dome is actually made up of perforated metal panels that allow for projection from both sides. The group was able to get a close look from the catwalks behind the dome. They even have a good size Dob stored back there.

John then took us on a tour of the **IMAX® Dome Theatre**. The IMAX® screen measures 3.5 stories tall and 65.7 feet in diameter. The projection room contains another impressive array of projection and sound equipment. We then toured some of the classroom / learning labs that the Science Center has. By this time the Center was open and FAAC members were free to enjoy the shows and exhibits.

Thanks once again to John and the DSC for showing us a great time!

ON THE ROAD ... TO FOREST ELEMENTARY SCHOOL

By Don Klaser

On Tuesday, February 4th, our club participated in the annual "Meet the Stars" night at Forest Elementary School in Farmington Hills. The school gym was decorated with posters and original artwork by the students, and there were a number of tables set up as craft stations where the second, third and fifth grade students could make straw rockets, astronaut finger puppets and paper plate comets. The club members who could attend set up their telescopes for display, answered questions from students and parents, and passed out Orion catalogues and "Welcome to Astronomy" brochures. Greg Burnett presented an abridged

version of 'Astronomy 101' to accommodate the attention span of our young audience. But the big hit of the night was the program given by John Schroer in the Detroit Science Centers' portable planetarium. An inflatable 9 ft. high by 26 ft. diameter dome, the students (and their parents) couldn't wait to get in!! Thanks to John and the DSC for making this available. Also, we had planned to set up a scope outdoors so that the students could view, but the wind & clouds that night kept us indoors. In spite of this, the evening was a great success, and we're looking forward to next year's "Meet the Stars" night!!

FAAC DINNER - SATURDAY, MARCH 15th

The FAAC Annual Dinner Party is Scheduled for 6pm Saturday, March 15.

All members, their families and friends are welcome. This year's Dinner Party will be held at the City Tavern located at 14316 Michigan Avenue Dearborn, MI 48126.

The dinner will be served family style and will include a salad, bread basket, roast sirloin of beef, roasted chicken, baked scrod, redskin potatoes, green bean almondine and bread pudding for dessert. Coffee and hot tea will also be included and there will be a cash bar available. The cost is \$20 per person payable that day and we will need your response by March 11.

Please respond to Mike Bruno by phone (313) 730-8752 or by e-mail brunomj@mindspring.com to let us know if you are coming. We hope to see you there! FAAC Board.

Map of 14316 Michigan Ave. Dearborn, MI 48126-3417
http://rd.yahoo.com/maps/insert/extmap/*-http://maps.yahoo.com/py/maps.py?&country=us&uz=48126&addr=14316+Michigan+Ave&city=Dearborn&state=MI&zip=48126-3417&mag=9

To add a little flavor to the Dinner, Al Bates has requested all members send some pictures of the Clubs 2002 past events and a couple of astro-photos. Al's email address is abates@wideopenwest.com

Crestwood School District - Ensign Planetarium Public Shows

**1501 Beech-Daly
Dearborn Heights, MI 48217
(313) 274-3711**

All shows begin at 7:00 pm

March 12: *The Earth-Sun Connection*

We love our star, but it changes on a daily basis. Find out what it's doing and how we are affected

April 19: *Earth Day and Astronomy Night*

Raise your consciousness as we explore issues facing the space program and our own views of the night sky

May 14: *The Latest in Space Exploration*

Find out what we're sending and what we've gotten back from our exploring probes

June 11: *Our Guest Star –Kristina!*

Kristina Nyland shines as or special guest star as she returns from U of M for a presentation on the latest in astronomy

RIDDLE OF THE MONTH - Answer...

After it lands on Earth, then it is called a Meteorite!

Fish Lake CCD / Astrophotography Workshop

By Jeff Thrush



A Motley Crew!

The 1st annual CCD / Astrophotography Workshop was held on January 31 – February 2, 2003 at Fish Lake (K.E.E.C., EMU's remote biology reserve near Lapeer, MI). KEEC is located east of Flint where skies allow viewing of faint astronomical objects that cannot be seen from the Metropolitan Detroit area. Late last year, during a phone conversation, Norbert Vance and I came up with an idea to host a workshop on CCD imaging and astrophotography. January is often very cold and frequently cloudy, but our intent was to bring together people with like interests and converse and share ideas with respect to imaging, and if lucky, get some hands on experience using various types of equipment. Well, as one would expect during this time of year, it was cloudy but a fresh snowfall, made for some beautiful winter scenery. After an introduction by Norbert Vance, valuable and interesting information was presented throughout Friday night and Saturday by experienced local amateurs in the science and art of astrophotography. I would like to thank Clayton Kessler, Jim Frisbie, Norbert Vance, Carl Burton, and Bruce Johnston for their informative talks! It took a great deal of effort on their part to prepare these talks and share ideas and experiences. Their efforts were greatly appreciated. Saturday's enthusiasm became solemn

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when we learned of the tragic loss of the Space Shuttle Columbia crew. Before talks began Saturday, a moment of silence was held in their honor. Late Saturday evening, Linda Hancock not only presented the gang with delicious dessert treats (home made chocolate pies and apple pastries helped lighten the mood) but also shared her experiences and fascinating slides, maps, and prints from a recent voyage to Antarctica. Below is a list of the speakers and the topics that were covered:

Clay Kessler - Hypering Color Film Developing Color Film

Clay has been taking beautiful astrophotos using a variety of telescopes, mounts, cameras, films and guiders. He frequents the dark skies of the Texas Star Party and outside Tucson, Arizona. Visit his website at

<http://www.gatecom.com/~ckessler> for examples of his work.

Jim Frisbie - Digicam Pics with a Nikon Coolpix

Jim stepped in to share some neat ideas and excellent pictures taken with his Nikon digital camera and telescope adapter. You can find him at meetings of the Ford Amateur Astronomy Club, serving as newsletter editor.

<http://www.boonhill.net/faac/>

Jeff Thrush - Choosing a CCD Camera Basic CCD Imaging

Jeff has been master of telescope and camera for more than two decades working most recently from his superb home observatory. Find details of the Thrush Observatory at

<http://www.thrushobservatory.com>

Carl Burton - CCD TriColor Imaging

Carl has done some wonderful CCD work using cameras on a Celestron C14 from what his family calls his observatory, the *Applewood Absurditory*. Find some of his superb images at

http://members.tripod.com/~carl_9/

Bruce Johnston - CCD Image Processing

Bruce has written two image processing programs that have been sold world-wide, Superfix and Megafix. He has also written several articles related to CCD imaging and image processing. Get more information on his home observatory, his software, and CCD images at

[http://members.aol.com/ ht a/ccdastro/](http://members.aol.com/ht_a/ccdastro/)

Norbert Vance - Basic Astrophotography

Norbert, serving as host of the workshop, has been photographing astronomical objects for many years and as Director of EMU's Sherzer Observatory been privy to some pretty nice equipment used in astrophotography.

<http://www.physics.emich.edu/nvance>

If you could not attend the workshop, you missed out on a lot of valuable information. Just ask the people who attended, a great time was had by all.

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