

The Bulletin – The monthly publication of the Indiana Astronomical Society

September, 2006  
Volume 73, Issue 9  
www.iasindy.org



# The Bulletin

## The September General Meeting, September 9, 7:00 PM Goethe Link Observatory

### Astronomy, Travel, Planes, Hawaii

Dr. Fritz Kleinhans

On occasion the opportunity presents to fly to an interesting astronomy destination. But how to get all that observing and photography gear to your destination? I will present some of my solutions to this problem (and show gear) with specific reference to a trip I made to Hawaii in 2004. I had excellent success with my Kenko Sky Memo R mount for astrophotography. Also I did a lot of research on logistics and where to do astronomy in Hawaii and will share those results.

\*\*\*\*\*

Fritz Kleinhans teaches physics and astronomy at IUPUI and is an IAS member and regular presenter at our meetings. He is looking forward to 2007 when he becomes his 'own boss' and will have more time for these adventure trips.

---

### Elections Are Coming

Man time flies! It is getting to be that time of year when we elect officers and Board members. Elections are in November. This year you will be electing the officers, President, Vice President, Treasurer, and Secretary, and two Board members. The Board has established a nominating committee to develop a slate of officers and Board members. If you have interest in running for an office or know someone who would be good, please let one of the members of the Committee know and we will place you on the ballot. You have to be a member in good standing and have been a member for at least a year. This is your chance to provide leadership in the Society and direction of its activities.

Nominating Committee:

Jeff Patterson – [KB9SRB@hotmail.com](mailto:KB9SRB@hotmail.com)

John Molt – [1stargazer@indy.rr.com](mailto:1stargazer@indy.rr.com)

Thad Hatchett - [astronomynut@sbcglobal.net](mailto:astronomynut@sbcglobal.net)

*The Pres*

---

## Weather Hampers Indiana Family Star Party Again This Year

This year the Astronomical League Great Lakes Region meeting was part of the festivities since NIAGfest was canceled as of last April.

Cloudy nighttime weather hampered efforts for observing. About the time stars became visible clouds would roll back in. Solar observing was plentiful, particularly on Sunday as we were packing for home.

There were ample opportunities to visit with friends and vendors. Many of us stayed up late and were able to enjoy movies and popcorn in the Nature Center, catering by Dumbo's (not just elephant ears!) and see a new high-tech idea in public outreach – The Astronomy Channel ([www.theastronomychannel.com](http://www.theastronomychannel.com))

Saturday activities included speaker programs, dedication of a newly completed dome containing a 178-mm refractor, Astro-Quiz competitions and judging of ATM equipment and the astrophotography contests.

Speakers from the Indiana Astronomical Society included David Williams, President, Variable Star Association, whose topic was "Variable Star Basics" and Bill Conner who talked on "Techniques and Treasures in Astro-Photography".

Congratulations are in order resulting from the Astro-Quiz:

Thad Hatchett won,

Gerald Venne, 2nd Place

Mary Venne 3rd place and also won 1st in the Junior Division!

Not to be outdone by others in the Astrophotography contests, Doug Sanquetti won the categories of CCD Imaging >500mm first place, CCD Imaging <500mm first place, and most popular photograph – way to go Doug!

Completely surprised was John Mahoney of Wabash Valley Astronomical Society in receiving The Astronomical League Great Lakes Region Award for "Outstanding Contributions to the Science of Astronomy and to its Public Outreach". His dedication to Camp Cullom and Prairie Grass is well known and much appreciated.

Thanks to all those who volunteered time and talents as it takes both for a successful star party.  
John Molt

---

### The "ASTRONOMY CAFE" COMES TO THE CINCINNATI OBSERVATORY CENTER'S ASTRONOMY FAIR.

On Saturday, September 16 2006, The Cincinnati Observatory Center will celebrate the hobby of astronomy with our annual *ScopeOut Astronomy Fair*.

ScopeOut 2006 is an opportunity for families and people of all ages to look at the latest and greatest astronomical equipment offered by local and national vendors. But that's not all! Other activities include:

Telescope making demonstrations

Space art and astrophotography exhibits

Educational resources for teachers

Science career information from UC, Xavier, NKU and other local universities

Kids' crafts, art contest and activities

Ask the Astronomer Booth

Safe viewing of the sun

The Bulletin – The monthly publication of the Indiana Astronomical Society

Evening stargazing through our 102 and 163 year old telescopes  
Tours of this National Historic Landmark  
The public is encouraged to bring their telescopes for expert help  
Door prizes include telescopes, binoculars, and all sorts of astronomical goodies.

ScopeOut 2006's evening's dinner/lecture features Dr. Sten Odenwald. You'll find his award-winning web site [The Astronomy Cafe](#) a fun place to visit for more about a career in astronomy, plus an 3001-question FAQ archive on space and astronomy from A to Z. Dr. Odenwald received the NASA 'Excellence in Outreach' award in 1999 from the Goddard Space Flight Center. His keynote lecture title is "*What's in Store for us in the 21st Century*".

Dr. Odenwald is also an *Education and Public Outreach Manager* for NASA. He has developed materials for teachers and students at their IMAGE education web site. Dr. Odenwald is also involved with the NASA Office of Space Science '[Sun-Earth Connection Education Forum](#)' where he develops new NASA resources in solar-terrestrial science education, and helps NASA work with teachers at national conventions and workshops across the country. Dr. Odenwald will also give an afternoon talk entitled "*Solar Storms*".

### **SCHEDULE OF EVENTS**

Noon to 5 PM for the Fair

6 PM to 8 PM for the dinner & Keynote Lecture

8 to 10:30 PM celestial viewing of the Moon and Stars (weather permitting)

### **ADMISSION**

Adults, \$5.00 Children \$3.00 Keynote Speaker and Dinner Reservations, add \$15

---

### **MUTS!!**

Well MUTS was a bust this year; foggy and partly cloudy. Those in attendance on Friday evening were, Thad, Terry, John Molt and John Wasmuth from Fishers (with 8" Orion dob). Everyone left by around noon Sat as it had been sprinkling part of morning and forecast was dismal. Maybe next year  
John Molt

---

## **New Astronomer's Group Meeting at McCloud**

McCloud Nature Center  
7:00 pm – September 1, 2006

The next meeting of the Indiana Astronomical Society's **New Astronomers Group** for 2006 will be held on Friday, September 1 at McCloud Nature Center starting at 7:30 pm, just prior to the monthly McCloud Friday Night Observing session.

**THE NAG MEETING WILL BE HELD, RAIN OR SHINE.**

Topics for this month:

- What's up in the September evening sky?
- The Pointer Stars and The Summer Triangle
- Our Solar System

The Bulletin – The monthly publication of the Indiana Astronomical Society

- The September Deep Sky
  - Our Own Milky Way
  - M2 – Globular Cluster in Aquarius
  - M34 – Open Cluster in Perseus
  - M39 – Open Cluster in Cygnus
  - NGC7662 – The Blue Snowball Nebula
- Autumn’s Finest Double Stars
- A Beginners Introduction to the Telescope
- Question and answer session

The purpose and intent of the NAG is to introduce new astronomers to observing the night sky. All types of observing will be discussed including naked eye, binocular and telescope.

If the weather cooperates, following the meeting, IAS members will have telescopes set up and attendees will have an opportunity to view some of the night sky objects discussed during the meeting.

**Second New Astronomers Group Meeting**  
**McCloud Nature Center**  
**7:30 pm – September 29, 2006**

The final meeting of the Indiana Astronomical Society’s New Astronomers Group for 2006 will be held on Friday, September 29 at McCloud Nature Center starting at 7:30 pm, just prior to the monthly McCloud Friday Night Observing session.

**THE NAG MEETING WILL BE HELD, RAIN OR SHINE.**

Topics for this month:

- What’s up in the Autumn evening sky?
- The Pointer Stars and The Summer Triangle
- Our Solar System
- The Autumn Deep Sky
  - M15 - Globular Cluster in Pegasus
  - M31 - Andromeda Galaxy in Andromeda
  - Alpha Persei Cluster in Perseus
  - NGC 869 and NGC 884 – The Double Cluster in Perseus
  - NGC 457 – Owl Cluster in Cassiopeia
- The Size of Our World
- A Beginners Introduction to the Telescope
- Question and answer session

The purpose and intent of the NAG is to introduce new astronomers to observing the night sky. All types of observing will be discussed including naked eye, binocular and telescope.

If the weather cooperates, following the meeting, IAS members will have telescopes set up and attendees will have an opportunity to view some of the night sky objects discussed during the meeting.

---

## Observer's Corner

### Dolphins and Topless Bikinis

Sandy Wolford

No, NOT a party on the club yacht (sorry!). Some observers consider the autumn sky, with its relative lack of bright stars, to be a boring area when compared to the bright constellations of winter, the multitude of spring galaxies, or the glories of the summer Milky Way. Personally, I find these comfortable and usually very steady (although often damp!) nights a great time to go out observing. My only dilemma is whether to browse the sections of Milky Way in the summer triangle still high overhead or search for the many deep sky objects in the (at first glance) barren areas above the southern horizon. For now, I've decided to spend some time in a couple of often unjustly neglected constellations: Delphinus and Capricornus.

Although one of the smallest constellations, Delphinus is a favorite of mine as he seems to leap his way playfully across the sky. The distinctive diamond of stars forming the little dolphin's head stands out easily in the southern skies below the Cygnus/Aquila Milky Way. The two brightest stars on the western edge of the diamond have a fascinating history. In Piazzi's *Palermo Catalogue* of 1814, alpha Delpheni was labeled "Sualocin" while beta Delpheni was "Rotanev". The derivation of these names posed a mystery throughout much of the 19th century until Thomas W. Webb pointed out that the names spell out "Nicolaus Venator" in reverse. This was the Latinized name of Piazzi's assistant Niccolo Cacciatore. Aside from the advertising hyperbole of today's commercial star registries, Nick is one of the few people to ever get away with "officially" attaching his name to a star, at least for a while!

Gamma, marking the dolphin's nose at the northeast corner of the diamond, is a nice double star which has long been known for its contrasting colors but there is some question as to exactly what those colors are. You should be able to split the pair in any telescope using a magnification of around 60 or 70x. Some have reported the companion as green, blue, or lilac; I see only a pair of golden yellow stars. What would you call them? [Struve 2725](#) is another attractive double star in the same field as gamma Del (about 14' to its SW).

Lying  $3\frac{1}{2}^\circ$  due E of gamma Del, NGC 7006 is one of two prominent globular clusters in Delphinus. Its compactness (concentration class I) and high surface brightness make it easily visible in most telescopes but its small size can make it easy to mistake for a faint "fuzzy star" in small instruments at low magnification. One of the distinguishing characteristics of this globular is that it lies much farther away than most. At around 140 thousand light years distance, it lies nearly 4 times farther away than M15, and ten times farther away than Omega Centuari.

NGC 6934 is the 2nd of the dolphin's globulars that is visible in amateur telescopes; it can be located about  $4^\circ$  S of epsilon Delphinus (the dolphin's "tail"). Through a 6 to 8-in telescope it appears as a soft circular glow, larger and brighter than NGC 7006. The

eyepiece field is fun to view in a smaller telescope because, along with 3 bright stars in a line to the west, it appears to me almost like a set of double headlights with one going out!

NGC 6905, the “blue flash nebula”, is a planetary nebula found  $4^{\circ}$  N and  $4^{\circ}$  W of alpha Del (the NW corner of the diamond). Located in a rich star field near the edge of the Milky Way with no definitive nearby bright guide stars finding it can be a challenge to your star hopping skills (hint: it helps if you know the width of your eyepiece field of view so you can judge distances as you are moving across the skies). This small faint nebulosity may be visible only with averted vision using smaller telescopes under normal sky conditions but holds magnification well for such a dim object. In my 8-in telescope it is nicely framed by 3 faint field stars. The slightly elongated disk is more or less uniform in brightness with diffuse edges in smaller instruments. As the size of the telescope increases, some mottling becomes noticeable across the disk. Larger scopes should show the 14th magnitude central star.

Moving south, we soon come to the fainter stars of the constellation Capricornus. Supposedly forming a “sea goat” (whatever oddity that might be), Capricornus’s crooked triangle shape more resembles a neckerchief or the bottom half of a bikini to me. Alpha 1-2 Cap, marking the NW corner of the triangle, is an optical double star whose 2 right components are easily separated with binoculars or your finderscope. A telescope using around 60x will show each of these to have a fainter nicely colored companion; higher magnification can show additional members of these multiple systems. Beta, lying about  $2\frac{1}{2}^{\circ}$  SE of alpha, is another double star easily separated in binoculars with the faint secondary star showing a nice color contrast.

Actually lying just within the borders of neighboring Aquarius, globular cluster M72 may be found about  $9^{\circ}$  due W of alpha Cap or  $3^{\circ}$  S and  $1\frac{1}{2}^{\circ}$  E of epsilon Delphini. The faintest of the globular clusters on the Messier list, M72 is fairly large for a globular cluster but not overly bright since its light is so spread out. Shapley classified it as class IX; among Messier's globulars, only M71 (class X-XI) and M56 (class X) are less concentrated. While you are in the area, you might want to locate M73 just to say you’ve seen it. About  $1\frac{1}{2}^{\circ}$  E and a little S of M72; look for a rather nondescript Y-shaped group of 4 stars. Logged as a nebulous comet-like object by Chuck Messier on a “bad ‘air day, I see a small triangle of three stars with a 4th dimmer star to the west.

M30 is readily visible in binoculars as a “fuzzy star” off the eastern side of the Capricornus triangle,  $6\frac{1}{2}^{\circ}$  S of gamma Cap and about  $1^{\circ}$  W of the mag 5 orange star 41 Cap. Small telescopes reveal a bright circular glow with a concentrated center. A brighter area at the western edge when viewed with smaller telescopes is actually an 8th magnitude star just a few arcminutes away.

**LARGER TELESCOPE CHALLENGE:** Although galaxies are sparse in Delphius, NGC 6928 is the brightest member of a foursome located  $1\frac{1}{2}^{\circ}$  S of epsilon Delphini, or  $2\frac{1}{2}^{\circ}$  N of globular cluster NGC 6934. Its slightly elongated disk glows at magnitude 12.5. A 10 or 12-in telescope can find the galaxy on a good night but a larger aperture will be needed

to see its companions: all within  $\frac{1}{2}^\circ$  of NGC 6928 and ranging from 14th to 15th magnitude.

<u>OBJECT</u>	<u>CON</u>	<u>TYP</u>	<u>RA</u>	<u>DEC</u>	<u>MAG</u>	<u>SIZE/SEP</u>	<u>NOTES</u>
NGC 6905	Del	PN	20h 22m	20° 06'	11.1	42" x 35"	blue flash
NGC 6928	Del	Gal	20h 33m	9° 56'	13.0	0.6' x 2'	
gamma	Del	DS	20h 47m	16° 07'	4.4/5.0	9.1"	PA 266°
Struve 2725	Del	DS	20h 46m	15° 54'	7.5/8.2	6.1"	PA 10°
NGC 7006	Del	GC	21h 01m	16° 11'	10.6	3'	
alpha 1-2	Cap	DS	20h 18m	-12° 32'	3.6/4.2	381"	PA 291°
alpha 1	Cap	DS	20h 18m	-12° 30'	4.2/13.7/9.2	44"/45"	PA
182°/221°							
alpha 2	Cap	DS	20h 18m	-12° 33'	3.5/11.0/9.3	6.6"/155"	PA
172°/156°							
beta	Cap	DS	20h 21m	-14° 47'	3.2/6.1	206"	PA 267°
NGC 6934	Cap	GC	20h 34m	7° 24'	8.9	7'	
NGC 6981	Cap	GC	20h 53m	-12° 32'	9.2	6'	M72
NGC 6994	Cap	Ast	20h 59m	-12° 38'	8.9	3'	M73
NGC 7099	Cap	GC	21h 40m	-23° 11'	6.9	11'	M30

For those of you engaged in various observing projects: NGC 6981, 6994 and 7099 are on the Messier List. NGC 6934 and 7006 are on the Caldwell list. NGC 6905, 6934, and 7006 are on the Herschel 400 list. Gamma Del and NGC 6934 are on the Urban Club List. Gamma Del, NGC 6905, and 7099 are on the Menard 400. Alpha 1-2 Cap, beta Cap, and gamma Del are on the AL double star list.

---

## McCloud

Paul Miner of the McCloud Park Board has requested that we observe the posted **15mph speed limit** on the property road going into the park. As the summer goes on there will be significant dust issues and there is a lot of wildlife and driving slow may save the life of one of their animals.

In addition, if you have only a small amount of equipment, the park is asking that we **not park on the grass unless necessary**. If possible, deliver your equipment to the site and then pull onto the gravel to park. Let's minimize the damage to the grass.

---

## McCloud New Moon Events

We have added an additional observing night each month at McCloud. We will be meeting on the Friday closest to the new moon. There will be no NAG type presentation but the public is also invited. Come out and enjoy our dark site. These are the dates for McCloud New Moon Under the Skies:

### McCloud New Moon Schedules

<b>NAG*</b>	<b>McCloud New Moon</b>
Sept 1	Aug 25
Sept 29	Sept 22

- Already scheduled

---

## Logo Clothing

We still have IAS logo hats, t shirts, polo shirts, sweat shirts and insulated jackets. Please contact Gerald Venne at the next general meeting.

---

## Field Trip to Morgan/Monroe

Dr. Caty Pilachowski and Dr. Kent Honeycutt have invited the IAS to tour their observatory facility in Morgan Monroe State Forest on October 14<sup>th</sup> as a continuation of Caty's program **FHiRE**. Plans are for us to meet at the Link Observatory for the annual Hog Roast at 5:00 PM and then caravan to the observatory site for the tour and hopefully to see the telescopes in operation.

There will be no general meeting speaker for October. If you like you can stay at Link and observe if the weather permits.

---

## Observer's Corner

### Nebraska Star Party

IAS members Jeff Patterson, John Shepherd, John Molt, John Kramer, and Chris Dietz attended the Nebraska Star Party at Merritt Reservoir. Shep and I arrived first on Thursday before the party to try to reserve the tree for some shade. Shade is a premium at this party as the temperatures range from 103-113 during the day. There is no electricity and my term for the weather is Brutal. Later in the week it was 103 in the motor home. Nights are quite pleasant and even cool. The sky was great as usual. We did lose a couple of nights to rain and wind but I think we had five outstanding observing nights. This is a party that the summer Milky Way goes from horizon to horizon. I hurt my back on Thursday and had to go to the hospital on Saturday to get some pain medication but later in the week I was able to go after the faint and fuzzies. Shep did most of the ladder positioning to save my back. Thursday night we were observing and all of a sudden both of us was wondering where the sky glow was coming from. There was a bloom in the north but there are no towns there. Then it dawned on us that we were observing an aurora. We have seen them there in the past. That was icing on the cake. All in all it was a good party and a lot of fun. This is a premier observing party and should be put on your list. Word was that the party will be moved next year. Apparently the Omaha group were having troubles with the new owners of the "Resort". They said they would let us know. The people of Valentine want the party to be held at Merritt Reservoir.

The Pres

---

## Mentor Program

The Board has been studying retention of members. Of the 50 or so members that do not renew their membership each year over half are first year members. So we want to do some things to reduce that exodus. We are reinstating the mentor program which will provide the new member with lots of information and help them assimilate into the Society. Thad Hatchett has volunteered to lead this program. We need your help. If you are interested in becoming a mentor please contact me at Jeff Patterson [KB9SRB@hotmail.com](mailto:KB9SRB@hotmail.com) or Thad Hatchett at [astronomynut@sbcglobal.net](mailto:astronomynut@sbcglobal.net). We will put your name on the list and assign a new person to you. Our goal is to retain people and make this hobby a lot more fun.

---

## Upcoming Star Parties and Registrations

**Okie-Tex Star Party** Western Oklahoma September 16th - September 24th , 2006  
<http://www.okie-tex.com>

**Illinois Dark Skies** IL Sep 21-23 225 miles 5 hour drive <http://www.sas-sky.org/main.htm>

**Astrofest** Sept 21-24 Kankakee , IL 4 hour drive <http://www.chicagoastro.org/> In the past this has been a premier party with lots of vendors. Lately they have had some organizational problems and last year many vendors did not come.

**Prairie Skies Star Party** Kankakee, IL Sep 28-30 175 miles 4 hour drive  
<http://www.prairieskies.org/>

**Twin Lakes Star Party** KY Oct 14-21 225 miles 5 hour drive <http://www.wkaa.net/>

If you know of events coming up let me know and I will get them in the Bulletin

Thanks to Mike Wolford for this information.

---

## Local School Events and Star Parties

Gerald Venne is our Public Program Chairman. He will be responsible for coordinating Public Events for the IAS. He needs your help. Let Gerald know if you would like to show the public our sky.

To schedule a public event contact Gerald Venne 1 317 826-2680 or Jeff Patterson at 1-317 882-8055.

---

## Orchids and Onions

A bouquet of orchids goes to Sandy Wolford who writes our observer's corner article every month. Sandy is a super observer herself and shares her knowledge each month. I look forward to the article each month.

Second orchid goes to Tom Borlik and Mike Kirsch for rebuilding the back storm door on the Link. Thanks guys.

Thanks Doug Brown for building another panel for the door at Link.

*The Pres*

---

## Astro Ads

Are you changing or upgrading your equipment? Do you have or are you looking for astronomical materials and equipment? The Indiana Astronomical Society as a service to its members, will publish non-commercial ads at no charge. The ad will stay in the Bulletin for 4 months and may be renewed at the owner's request.

### To place an ad contact:

Bulletin Editor

Jeff Patterson

1780 S. Morgantown Rd.

Greenwood, IN 46143

(317) 882-8055

E-Mail: [KB9SRB@Hotmail.com](mailto:KB9SRB@Hotmail.com)

**For Sale** - Discovery Premium DHQ 10" f/6 Dobsonian reflector

Optics:

Primary mirror: 10" annealed Pyrex glass, premium aluminum coating

Minor diagonal: 2.14"

Focal length: 1524mm (60")

2" JMI Crayford focuser w/1.25" adapter

Tube:

1-piece heavy duty sonotube, black

Tube length: 63"

Tube diameter: 12"

Tube weight: 51 lbs.

Ebony-Star formica bearing surfaces

Adjustable bearings

Base:

Quality, finished, solid birch construction

Dimensions: 15.5"W x 18.5"D x 16.75"H

Weight: 24 lbs.

Eyepieces:

Orion Expanse Wide-field set, 1.25" includes:

6mm, 9mm, 15mm, and 20mm, all in original boxes with end-caps.

J&T Series 500 10mm Plossl

Unknown brand multi-coated 25mm Plossl (really nice views)

Unknown brand 15mm AF40 Plossl (came with the telescope)

2" Orion Optiluxe 32mm, in original box with end-caps

Other accessories:

Telrad reflex sight

Orion 9x50 Correct-Image right-angle finder scope

1.25" Orion Variable Polarizing filter

Discovery Laser Collimator

Celestron Night Vision red LED flashlight

The Bulletin – The monthly publication of the Indiana Astronomical Society

Lightweight observing vest (size: Large) with multiple pockets for eyepieces, etc.  
Black eyepatch  
Manuals for the 'scope, the 9x50 finder, and the Telrad.

All has been well-cared for and is in very good-to-excellent condition.

I bought the telescope (with telrad and one eyepiece) new in 2001 for \$1000.00  
Asking \$950.00 for telescope and all accessories.  
Pics available on request.

Contact Jane Stranger [rstranger@insightbb.com](mailto:rstranger@insightbb.com)

---

## **Loaner Equipment Program**

### **Gracious Donations of Equipment Help Loaner Program**

Thanks to Joe Goss, John and Vicky Switzer, Doug Sanquetti and David Williams for donations of eyepieces for the Loaner Program. Requests from members and newly acquired or refurbished instruments had and has created need for more. The Loaner Program has been helpful to those new to the hobby and others in need of observing equipment. We consider offers of equipment you may not have need for any longer.

Did you know you can borrow a scope or piece of astronomy equipment from the Society and take it for a test drive? The Society has a program where members who are trying to determine what kind of equipment to buy can borrow one of the Society's scopes for a month or two and see how they like it. John Molt is the chairman of the program and can arrange for your pickup and training on the use of the particular instrument. This is a great way to see what telescope you want to purchase. We have several scopes, eyepieces and binoculars to loan.

John Molt ([lstargazer@indy.rr.com](mailto:lstargazer@indy.rr.com)) or 317-844-1799)

---

## **List Server Online - Don't be left in the cold - Sign up!**

This service is our main communication tool. The list server is in the "Members Only" section of the site and is accessible only by IAS members. Make sure we have your correct e-mail and you will have access for late updates to events and functions.

Note: The list server is for use of Society business. It can only be used according to the rules as outlined previously. Members abusing the service will be eliminated from the service.

---

## **Board Meeting – September 14, 2006 - 7:00 PM**

The IAS Board Meeting is being held at 430 Massachusetts Avenue in downtown Indianapolis. The building is at the point of convergence of Mass. Ave., Vermont and Alabama Streets. There is a Starbucks located in the frontage of the building. The coffee shop stays open late into the evening. Try to park as close to Starbucks as possible, preferably in a metered space. On-street parking is free after 5pm. Handicapped parking is directly in front of Starbucks entrance. The main entrance to the building is to the right of Starbucks, but it will be locked. To get into the building, walk around the building to the left as you are facing Starbucks. You will cross Starbucks outdoor patio seating area and you will come to the double door entry into the building (this is the south building

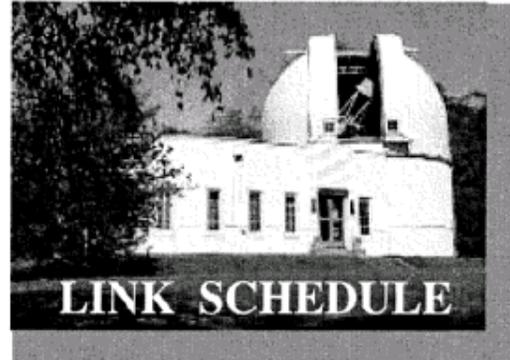
façade). These doors will be unlocked. Enter the lobby and ride the elevator (to your right) to the basement. Turn right as you exit the elevator and go through the first door on your right. This is the conference/meeting room. If you need further

---

## **Goethe Link Observatory Observatory Address**

**Goethe Link Observatory  
8403 N. Observatory Lane  
Martinsville, IN 46151**

**Observatory 's Phone:  
(317) 831-0668**



This schedule is being published to assure proper access to the Link Observatory for programs that are designed as observational, general education, astronomy conferences or amateur research projects. Training programs are tentatively scheduled for Saturday evenings only. Although other requests can over-ride these sessions. It is the purpose of this listing to prevent activity conflicts.

If you need to acquire use of the 36-inch telescope: remember two important IAS guidelines:  
1) *There has to be two or more IAS members present.....*2) *contact the Observatory Manager: Gary Schoppenhorst (317)297-1405. DON'T WAIT UNTIL THE LAST MINUTE TO MAKE YOUR REQUEST OR YOU MAY NOT GET ACCESS.*

### **Link Activities for September:**

General Meeting – Sept 9  
Observer's Meeting – Sept 23  
Link Training – Sept 23  
New Moon – Sept 23

### **McCloud Activities for September:**

Beginners Astronomy – September 1 & 29  
New Moon –September 22

### **Observing Activities**

We are able to go to the Link, Prairie Grass Observatories and McCloud Nature Park at non scheduled times if they do not conflict with reserved activities:

For those interested in going to The Link Observatories for observing call Gary Schoppenhorst 1 317 297-1405.

For those interested in going to Prairie Grass Observatories for observing call Hoppe at 1-765-296-2753.

The Bulletin – The monthly publication of the Indiana Astronomical Society

For those interested in going to McCloud to observe, please call Paul Miner at the park office 765 676 5490 before 5PM on the day you want to go out. As a last resort you can reach him on his cell phone at 317-371-8222 before 5 pm.

---

## **Bulletin Stats**

All personal and professional opinions presented herein do not, in any way, represent the opinion or policy of JPL or NASA.

### **Accessing the Bulletin**

The current bulletin can be found on the website [www.iasindy.org](http://www.iasindy.org)

### **Bulletin - Bulletin deadline on the 20th of every month**

The monthly newsletter welcomes articles of local astronomical interest information and want ads:

Please submit to

The Indiana Astronomical Society, Inc

Jeff Patterson, editor

1780 S. Morgantown Rd

Greenwood, IN 46143

Phone: (317) 882-8055

[KB9SRB@hotmail.com](mailto:KB9SRB@hotmail.com)

### **Membership information**

Contact any IAS officer or the Treasurer

John Shepherd (317) 862-3442

### **Link Observatory**

Latitude: 39 degrees, 33 minutes North

Longitude: 86 degrees, 24 minutes West

Phone: (317) 831-0668

IAS Internet address

<http://www.iasindy.org>

### **Executive Officers**

President: Jeff Patterson (317) 882-8055

Vice-President and Program Director: Brian Murphy (317) 841-8511

Secretary: Betsy Brown 1-317-872-4050

Treasurer: John Shepherd (317) 862-3442

### **Board of Directors**

Gary Schoppenhorst (2006)

Gerald Venne (2006)

Thad Hatchett (2007)

Doug Brown (2007)

Bill Conner (2007)

Marion Hakes (2008)

John Molt (2008)

### **Public Event Chairman**

The Bulletin – The monthly publication of the Indiana Astronomical Society

Gerald Venne [gvenne@iquest.net](mailto:gvenne@iquest.net) 1 317 826-2680

**Library Committee Chairman**

Ed Otto [ecotto1@comcast.net](mailto:ecotto1@comcast.net)

### September Calendar, 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<b>1</b> NAG at McCloud	<b>2</b>
<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b> Full Moon	<b>8</b>	<b>9</b> General Meeting Link
<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b> Board Meeting Last Qtr Moon	<b>15</b>	<b>16</b>
<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b> New Moon Meeting at McCloud  New Moon	<b>23</b> New Moon Meeting at Link Observers Meeting at Link
<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b> NAG at McCloud	<b>30</b> First Qtr Moon

## Membership Application to the IAS

### Benefits:

- Use of the Goethe Link Observatory
- Formal monthly programs with guest speakers
- Local and regional astronomical functions
- Discounted Astronomy publications
- New Moon observing activities
- Access to IAS member experts and problem solving
- The Bulletin monthly newsletter
- Free admission to the Holcomb planetarium
- Star party events and observing sessions

Please mark whether this is a new or renewal application

New

Renewal

Note: Magazine subscription renewals forms and payment must be submitted to the Treasurer in order to maintain publisher's club discount.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Telephone: ( ) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

How do you want to receive the IAS monthly newsletter?

Downloadable from Website  Hard Copy\*

\* Please note that hard copy costs the Society about \$1.50 per issue. Please consider this when selecting mode of receiving the newsletter.

Annual Regular Membership (\$25.00)	
Annual Student Membership (\$10.00)	

The Bulletin – The monthly publication of the Indiana Astronomical Society

Astronomy Magazine Renewal (\$34.00)	
Sky and Telescope Magazine (\$33.00)	
Total Enclosed	

Make checks payable to: The Indiana Astronomical Society, Inc

Please complete Member Profile and include with the application

Mail Application to: John Shepherd, Treasurer  
4609 Callahan St.  
Indianapolis, IN 46239

Member Profile

Spouses Name: \_\_\_\_\_

Children's names and ages: \_\_\_\_\_

Education: \_\_\_\_\_

Occupation: \_\_\_\_\_

How many years associated with Astronomy? \_\_\_\_\_

Special astronomical interests or projects: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

-

Equipment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What can the Society do for you? \_\_\_\_\_

\_\_\_\_\_

What can you do for the Society? \_\_\_\_\_

\_\_\_\_\_

Note: Profile information is not a requirement for membership to the Society. This information is entered into the IAS database and is not given nor sold for solicitation purposes. It does provide for a brief welcoming article for new members and may be used by the society to match people with similar interests.