



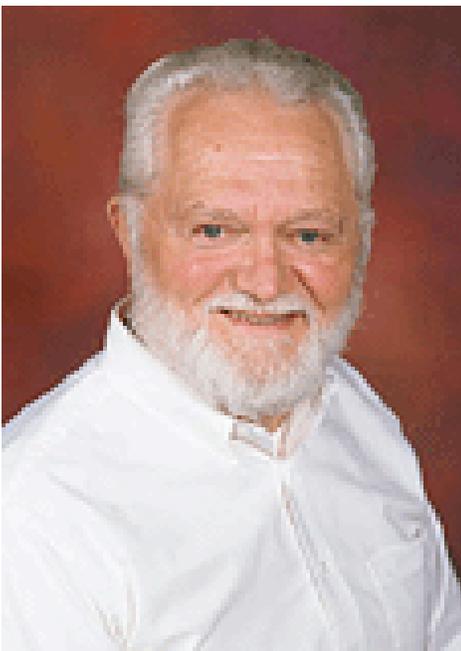
The Bulletin

The January General Meeting, January 14, 7:00 PM Butler Holcomb Observatory

"Astronomy in Ancient Ireland"

Ronald Hicks

In Ireland as in Great Britain, there is evidence that by 5000 years ago attention was being devoted to the movement of the sun and the moon, and probably other heavenly bodies. Just as we can see this in the orientation of Stonehenge toward the summer solstice sunrise, we also find it in Ireland at such monuments as the "passage tomb" of Newgrange, whose 70-foot passage is oriented toward the sunrise at the winter solstice. In Ireland, unlike Great Britain, however, there exists a wealth of early literature that also sheds light on this interest in the skies. Irish myth and pre-Christian seasonal celebrations were closely linked to the agricultural cycle, and particular sites are associated with the major festival dates. This talk will look at a number of the prehistoric sites that have astronomical alignments--some mentioned in the myths and some not--and will discuss the interplay between the site locations, the mythology, astronomical alignments, and the calendar.



Ronald Hicks is a professor and chair of the Department of Anthropology at Ball State University. He received his bachelor's degree in international relations from Purdue University in 1963, after which he served as an officer in the U. S. Navy in the Pacific and then worked as an editor for various publishers in New York and Philadelphia before completing his Ph.D. at the University of Pennsylvania in 1975. His dissertation research focused on identifying and interpreting earthen monuments in Ireland that resembled the early, pre-stone enclosure at England's Stonehenge. In the course of that work he became interested in archaeoastronomy after observing that a significant number of the monuments were oriented on sunrise at the times of the major pre-Christian agricultural festivals. Since 1979 he has served as a consulting editor for the journal *Archaeoastronomy*.

Since 1976 he has been at Ball State. Soon after arriving there he established the Archaeological Resources Management Service, a consulting organization operating within the anthropology department that for

nearly thirty years has carried out contract archaeology as well as basic research throughout Indiana, thus providing a needed public service as well as training for students, many of whom have gone on to high level jobs in consulting firms and government agencies throughout the U.S. Then, in the mid-1980s he was asked to become the first director of the university's Center for International Programs, charged with coordinating efforts to attract students from abroad and to provide foreign study and exchange opportunities for U.S. students and university faculty. He resigned from that position after four years in order to be able to devote time to his research interests but was immediately asked to become interim chair of the Department of Anthropology. What was to have been a two-year appointment became six years before he again turned his attention back to his research.

Since that time--or at least until he was again asked to serve as chair this past summer--he has devoted his attention to analyzing Irish myth in an attempt to gain an understanding of its underlying meaning, determining the geographic locations of the hundreds of places mentioned, determining the nature of any prehistoric remains surviving at those places through fieldwork, and looking at the relationships among the places in the context of the myth. Often site orientations or intersite relationships reflect calendrical or other astronomically related concerns, such as the seasonal festivals and significant movements of the sun and moon. Thus the landscape was seen as sacred and intimately related to the belief system.

It is this work that forms the topic of tonight's talk:

Christmas Party a Great Success

We had a great time at the party. There were festivities and lots of food. Thanks to Angie Molt for another great feed. Next time you see her let her know how much you appreciate her work.

We had a great raffle. We grossed \$600 and costs ran \$136.98 - so we netted \$463 for the McCloud Fund. I think that puts us about even, or in the black, with McCloud expenses to date. There was some talk among the troops that we not let Thad buy a ticket any more however. Another suggestion is for him to buy us a lottery ticket. Any way he went away with the grand prize.

The 2006 Intel International Science and Engineering Fair is Coming to Indianapolis ! Overview of the May 7-13, 2006 Intel ISEF, Indianapolis, Indiana

The Science Education Foundation of Indiana (SEFI) is planning the 2006 Intel International Science and Engineering Fair (IISEF). SEFI will co-host the May 2006 event with the Indianapolis Convention and Visitors Association. The competition will attract 1,500 of the top science and engineering high school students in the world, representing 45 states and 40 foreign countries. Including the science advisors, parents, and 1,200 distinguished judges, the ISEF will attract 5,000 visitors and generate over \$6 million for the city. Hundreds of Hoosier volunteers will be needed to help. During the week the students will compete for scientific recognition, valuable prizes, and scholarships. Attractive tours will be available for visiting the state's points of interest, the research universities, and the leading corporate programs. The exhibition hall will be open to the public after the judging when many Indiana students, parents and teachers may observe the exhibits and learn more about careers in science and technology.

Science Service, a private foundation located in Washington, D.C., is the IISEF parent organization that provides the rules, regulations, and registry of the science fairs world-wide. The Intel Corporation generously contributes to the student prizes and sponsors other futuristic programs during the event. The 2006 theme, "Winning with Science," is attracting leaders in education and government to be part of the "renaissance of science education" and recruiting students into professional careers. Volunteers may join the initiative at www.intelisef2006.org.

The fair needs a minimum of 38 judges in space science, specifically. If members have contacts with other scientists in any field, it would help if they could tell them about the fair. The web site is www.intelisef2006.org. If you have any other questions or would like to be a judge, please send a note to Robert Yost at ryost@iupui.edu

2006 Observer's Handbooks

The new handbooks are in. John Shepherd has them for \$18.00. They are chocked full of celestial information and are really handy.

See John if you want one.

2006 McCloud Schedule

The New Astronomers Group held from April thru September is designed with the beginning amateur astronomer in mind. Meetings start at 7:00 pm on the Friday closest to the 1st Quarter Moon (see schedule below). Emphasis is on actual observing to help beginners find their way around the night sky and, in particular, how to find those faint but interesting objects such as planets, galaxies and nebulae of all kinds. In addition to discussing the night sky for the current month, a selected topic of interest to the beginning astronomer will be covered. The currently scheduled selected topics for 2006 are:

April 7 Telescopes, binoculars and other viewing aids

May 5 Resources on Internet for the beginning astronomer

June 2 Our closest neighbor, the Moon

June 30 The Beginners Year around Observing Planner The Messier List

July 28 Celestial Fireworks Meteor Showers

September 1 Autumns Finest Double Stars

September 29 To Be Determined

All sessions are taught by experienced IAS members. If weather conditions permit, observing through IAS members telescopes and binoculars will be available for attendees following the meeting.



A New View of the Andromeda Galaxy

By Dr. Tony Phillips and Patrick L. Barry

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This is a good time of year to see the Andromeda galaxy. When the sun sets and the sky fades to black, Andromeda materializes high in the eastern sky. You can find it with your unaided eye. At first glance, it looks like a very dim, fuzzy comet, wider than the full moon. Upon closer inspection through a backyard telescope—wow! It's a beautiful spiral galaxy.

At a distance of “only” 2 million light-years, Andromeda is the nearest big galaxy to the Milky Way, and astronomers know it better than any other. The swirling shape of Andromeda is utterly familiar.

Not anymore. A space telescope named GALEX has captured a new and different view of Andromeda. According to GALEX, Andromeda is not a spiral but a ring.

GALEX is the “Galaxy Evolution Explorer,” an ultraviolet telescope launched by NASA in 2003. Its mission is to learn how galaxies are born and how they change with age. GALEX's ability to see ultraviolet (UV) light is crucial; UV radiation comes from newborn stars, so UV images of galaxies reveal star birth—the central process of galaxy evolution.

GALEX's sensitivity to UV is why Andromeda looks different. To the human eye (or to an ordinary visible-light telescope), Andromeda remains its usual self: a vast whirlpool of stars, all ages and all sizes. To GALEX, Andromeda is defined by its youngest, hottest stars. They are concentrated in the galaxy's core and scattered around a vast ring some 150,000 light years in diameter. It's utterly *unfamiliar*.

“Looking at familiar galaxies with a new wavelength, UV, allows us to get a better understanding of the processes affecting their evolution,” says Samuel Boissier, a member of the GALEX team at the Observatories of the Carnegie Institution of Washington.

Beyond Andromeda lies a whole universe of galaxies—spirals, ellipticals and irregulars, giants and dwarfs, each with its own surprising patterns of star formation. To discover those patterns, GALEX has imaged hundreds of nearby galaxies. Only a few, such as Andromeda, have been analyzed in complete detail. “We still have a lot of work to do,” says Boissier, enthusiastically.

GALEX has photographed an even greater number of distant galaxies—“some as far away as 10 billion light-years,” Boissier adds—to measure how the rate of new star formation has changed over the universe's long history. Contained in those terabytes of data is our universe's “life story.” Unraveling it will keep scientists busy for years to come.

For more about GALEX, visit www.galex.caltech.edu. Kids can see how to make a galactic art project at spaceplace.nasa.gov/en/kids/galex/art.shtml.



The GALEX telescope took this UV image of the Andromeda galaxy (M31), revealing a surprising shape not apparent in visible light.

Memories – John May

It has been a year since we lost John May after a long battle with Cancer. We still miss his presence and his dedication to the IAS. Mike Kirsch ran into one of the reporters from the Martinsville Times and found this story about John. Amy Hillenburg gave us permission to reprint it.

John Phil May Captures the Feelings

By Amy Hillenburg, Hoosier Times, Mooresville January, 2002

Morgan County photographer John Phil May loved to look at picture books as a child. He used to haunt local libraries, turning the

colorful pages and soaking up the images of people, places and events. He took snapshots “just for fun” and could hardly wait to see the

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photos come alive on paper. The Mooresville resident believes this was the start of a lifelong career that has now taken him to the skies. He is an amateur astronomer with an outdoor telescope and specialized camera equipment, which makes him capable of shooting "astrophotography." His computer layout takes up an entire room in his house. Photos of all kinds of faraway things, including the pocked surfaces of planets and stars, cover the walls in his office. "When I was five or six years old, we lived in a second-floor apartment. My mom told me to go to the bedroom and open the window. She showed me the star and crescent. When I went to college, the campus was out in the country. A professor shared his knowledge of the constellations with me. I started reading magazines on astronomy and thought I could really get into it. There's a lot of math, visuals and reading in that science", May said. He noted that astrophotography is a very exact discipline, which brings all his computer skills to the forefront. "I took PhotoShop at Ivy Tech, and it's so great. All your tools are right there on the screen. You don't have the clutter of little brushes and pens. Everything you need is a click away" May now handles publicity and a newsletter for Link Observatory in Morgan County. He was a photographer's mate in the Navy, and said he almost re-upped after his tour of duty ended just to keep taking pictures. He worked as a photograph developer for the Indianapolis Star/News and was employed as an assistant photography manager for United Press International (UPI). May also served as a stringer, or freelance photographer, for the Associated Press (AP). He's spent 21 years at Eli Lilly, doing slide presentations and training videos for the corporate giant.

Freelance work

The retire professional now freelances as a photographer for local fire and police departments and has lent his services to Brown Township, Madison Township, Mooresville, Monroe Township and Avon fire departments. May also takes pictures for Chief Tim Viles of the Mooresville Police

Department. Many of his photographs are used in court cases, and by fire departments that need to document their training exercises. "He's taken some accident pictures for us, and once in awhile, copies are needed for insurance companies. But 90 percent of John's work is for the fire departments," Viles said. May's photographs of the fires have a life of their own, and he explained why. "Fire is a living, breathing entity. The flames can be hypnotizing, but you've got to remember how dangerous they are," Dave Davis, fire chief for Brown Township, said May is actually trained as a volunteer fireman. "He wanted to understand how our team works, and as a photographer, how to stay out of the way. John is also schooled in arson investigation. He is aware of what clues to look for after we put out a fire. John keeps a file of fire/accident scene pictures for us, and some are used for news articles", Davis said. He added that May is not only a valuable part of day-to-day operations, but he also coordinates fire department slide shows for programs and corporate parties. May has worked as a studio photographer and still enjoys taking family and individual pictures when he has time. He trained at Butler and Indiana University and completed portraiture studies at Winona Hospital. His job has taken him to Europe, Puerto Rico and Hawaii. May and his wife Molly have three children, Dorea, Todd and Jonathan. The couple often collaborates on creative projects.

Time standing still

Dorea is a second-year Criminal Justice major at IUPUI. She shares an interest in astronomy with her father, and the two have signed up for a class together. May said his fascination with photography stems from seeing things unfold in front of his eyes. "When I look at visuals, I imagine a scene in my mind. I loves still pictures, because they capture the moment and the impact of an event." May said. He was not tempted to join other professional photographers who rushed to New York after Sept. 11, but pictures taken by common citizens have captivated him. "Now that we have video camcorders and

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digital cameras, it's easy for war and tragedy to be captured by amateurs" May said. "The tremendous visual impact of photography needs no words. Even children are influenced by what they see on television and in movies. I actually think the graphic videos and pictures taken in Vietnam helped end our involvement in that conflict" May said. The former owner of Memories Studios in Mooresville described the excitement of photography. "I love the whole process " setting the scene, taking the pictures and making them " even though they don't always turn out the way you want" ; May said. "I really enjoy shooting pictures of emergency crews, police and firefighters, because the action is constant; it's happening all around you," May said he doesn't take pictures that other people might like. He captures what interests him. "I don't create photographs. I recreate the scene by shooting a picture and then recording it," May said. He mentioned two main reasons for taking pictures" to document living moments and to find something unique in a certain situation. Action shots present the most difficulty for photographers, May said. "It's sort of like taking a picture of Indians riding up a hill. You don't start shooting the camera when they get to the top. You begin while they are still climbing,"

Moral dilemmas

Media photographers are constantly teetering on the boundary line between the public's right to know and the invasion of emotional privacy. "In an accident of fire, your camera is invading someone's space. It gets down to a moral situation" is it for the greater good? It would be my prerogative to record a sensitive subject or event if I knew it might save somebody's life later on," May said. He recalled one incident where a newspaper colleague took a picture of a driver trapped in a burning oil tanker truck. "It was a terrible accident, and the man was reaching out of his window for help. There was fire everywhere, and it was an awesome photograph," May commented. "But the photographer got a lot of flack from the public on it because the driver died. There was no way he could have helped that person "emergency crews were already arriving on the scene." May said the picture's impact brought about needed changes, though. The tanker trucks were later redesigned to make the cabs safer for drivers during a collision. The photograph was redeemed by the industry's reaction to an image burned on their consciousness. And for John Phil May, that's reason enough to keep taking pictures.

Membership Stats

We basically have 145 active members with the possibility of 3 more renewing as compared to 163 active members last year. Forty-one new people became members of the Society as compared to 49 new members the previous year. 104 former members renewed their memberships as compared to 114 the previous year. 60 members were dropped from active membership (4 being deaths) as compared to 44 known from May - Dec of last year.

We have really been pretty stable for the last several years with a membership of 140-160 members. Most people who drop out are fairly new members which is probably true for any organization. We need to figure out how to retain these new members and meet their needs.

The Pres

McCloud Nature Park Project Fund

In an effort to fund the project the IAS Board has created a "McCloud Fund". All donations to the Fund will go directly towards funding the improvement project which will include the storage building and warming room and six electrified concrete pads.

If you would like to make a cash donation to the McCloud Fund, please send it to:

John Shepherd, Treasurer
4609 Callahan St.
Indianapolis, IN 46239

The IAS is a Not-For-Profit 501 C-3 corporation. Your donation may be tax deductible. Consult your tax advisor.

Upcoming Star Parties and Registrations

Winter Star Party – February 20-25, 2006- Registration has ended but tickets are always available on Astromart and elsewhere.. Check www.scas.org or call the registrar at 386-362-5995. This party is always sold out and you need to get a ticket early. This is a premium party and the weather is fantastic in the Florida Keyes in February.

Texas Star Party – April 23-30, 2006 - TSP 2006 Reservations will include both on-site and off-site attendees, so everyone will need to submit a TSP Registration/Reservation Request Form , before January 17, 2006 which will be processed through a random drawing in late January 2006. This drawing will also include the allocation of all accommodations on the Ranch (camping and covered housing). The online form is available at <http://www.texasstarparty.org/draw.html>.

Niagfest – will probably be April 28-30. Stay tuned. This is a nice weekend star party and is a lot of fun. It can be cold but they have indoor activities as well.

Nebraska Star Party – July 23-28, 2006 – This is a premier party with about as dark skies as you can find. Seven of us went out last year and had a ball. Join us this year and experience a truly dark site. www.nebraskastarparty.org

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

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.

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: JMPSR@Iquest.net

For Sale –Celestron 20x80 mm binoculars and case. Excellent condition \$250. Jeff Patterson 317 882=8055 (2/06)

For Sale –Obsession 18” with ServoCat guidance. Galaxy F/4.5 premium primary. Many accessories. Outstanding images. Excellent condition \$6500. Jeff Patterson 317 882=8055 (2/06)

Loaner Equipment Program

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. Contact John Molt at 1stargazer@indy.rr.com.

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.

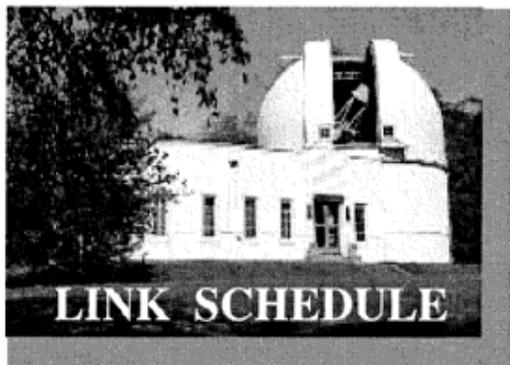
Note: The list server is for use of Society business. It can only be used according to the rules as outlined previously. Members abusing the service will be eliminated from the service.

Board Meeting – January 19, 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

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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 assistance, please contact Brian P. Murphy, IAS Vice-President on his cell phone 716-8124.



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.*

Designated Link Observatory Key Holders

Jeff Patterson: 882-8055
Tom Borlik: 849-4113
Gary Schoppenhorst: 297-1405

Brian Murphy: 841-8511
Dave Williams: 769-7430
Gerald Venne: 826-2680

Link Activities for January:

Observer's Meeting – None this month
Link Training – None this month

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McCloud Activities:

New Moon Group – None this month.

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.

For those interested in going to McCloud to observe, please call the caretaker Cecil Rich at 765 366-3235 before 5PM on the day you want to go out.

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

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

JMPSR@Iquest.net

Membership information

Contact any IAS officer or the membership chairman

Larry Phillips

9413 South PR Black Hawk Hills Dr.

Edinburgh, In 46124

llpastro@lightbound.com

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>

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Gerald Venne gvenne@iquest.net 1 317 826-2680

Library Committee Chairman

Ed Otto ecottol@comcast.net

January Calendar, 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6 First Qtr Moon	7
8	9	10	11	12	13 Full Moon	14 General Meeting Butler
15	16	17	18	19	20	21
22 Last Qtr Moon	23	24	25	26	27	28
29 New Moon	30	31				

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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)	
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

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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.